GENERAL ELECTRIC
SERVICE INFORMATION

MODEL
3-5259A

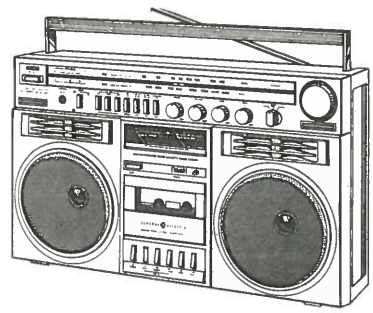
AM/FM/FM STEREO
CASSETTE RECORDER

FILE TAB 3

CAUTION: THIS MANUAL IS DESIGNED FOR USE BY QUALIFIED ELECTRONIC TECHNICIANS ONLY. CONSUMER USERS ARE URGED TO CONTACT QUALIFIED FACTORY AUTHORIZED SERVICE FACILITIES FOR REPAIRS.

FEATURES

● Solid state AM/FM/FM stereo Cassette Recorder ● Two-way dynamic speaker system - 6" woofer and cone tweeter for each channel ● Tape select switch for normal and $C_r O_2$ tapes ● Dual vu meter with two position switch for: Station signal strength, tape recording level and battery condition ● Mechanical pause control ● Built-in Left & Right internal Microphones ● Automatic end of tape shut-off in all tape modes ● Cushion eject ● Two Antenna Systems: telescopic whip antenna for FM and Built-in Ferrite Rod Antenna for AM ● Loudness compensation switch ● Three-way power capability: Detachable AC line cord, eight "D" cell batteries (not incl.) and 12 volt car adapter (optional) ● Built-in ALC for Record and AFC to reduce FM Drift ● FM Stereo LED ● Stereo Accent switch ● MLS-Music Location System ● AM Osc. switch to reduce interference when recording ● Jack for optional accessories: Stereo headphone jack (1/4"), External microphone input jacks (3.5mm), External Speaker Jacks (RCA Type), Aux-input Jacks (RCA type), Remote On-Off Jack (2.5mm) and external 12v DC Power Jack



SERVICE

ELECTRICAL

Power Options [B+ = 12V DC]	Line Cord, 120V AC, 60Hz Battery, 8 "D" cells Car Adapter, 5-1062 (12V)	
Voltage Operating Range	AC - 105 to 130V, 60 Hz DC - 8.8 to 13.5V DC	
Max. Current Drains [Min. Volume, No Signal C60 Cassette Tape installed with tape evenly distributed on both reels]	AM Radio FM Radio FM Stereo Play Rewind Fast Forward Record & FM Stereo	110 mA 130 mA 135 mA 190 mA 230 mA 230 mA 275 mA
Speaker Impedance	Woofer, 3.2Ω Tweeter, 4.0Ω	
Min. Volume Hum (120V AC line cord Operated)	6.0uW	
Audio Output @ 10% thd. per channel	5.0W on AC Operation 3.5W on DC Operation	

SPECIFICATIONS

AM RADIO

Tuning Range	520KHz to 1615KHz
Sensitivity 20db Quieting	400 uv/M Max. @1000KHz
I.F.	455 KHz
Image Ratio	38db Min.

FM RADIO

Tuning Range	88.0 MHz to 108.3 MHz
Sensitivity @30db quieting	18 uv Max.
I.F.	10.7 MHz
Image Ratio	30 db Min.
Stereo Ch. Separation	18 db @ 6 KHz Signal 25 db @ 1 KHz Signal

TAPE RECORDER

Tape Speed	1 7/8 i.p.s. ± 3%
Record Bias	AC
Erase System	AC
Erase Ratio	46 db Min.
Cross Talk	55 db Min.
Wow & Flutter (Max.)	.35% RMS jis unweighted
Playback Freq. Response (Flat)	125 Hz - 8000 Hz ± 6 db
Overall P/R Freq. Response	100 Hz - 7000 Hz ± 6 db
S/N Ratio	42 db Min.

FUNCTIONAL CHECK

- First, check Pause button to make sure it is in the "UP" position. Now operate unit, without a cassette in "PLAY" mode and leave cassette lid open. The pinchwheel should be tight against the capstan, and moderate pressure will be required to stop the capstan or pinchwheel with finger pressure. If not, there may be belt slippage or a defective motor assuming batteries are good. The right take-up reel should rotate counterclockwise and should resist being stopped when you press your finger against it. The left supply reel will be motionless and should rotate freely when you turn it with your fingers. Check for mechanical automatic end-of-tape shut off by pressing your finger against right take-up reel and stop it from rotating. The unit should electrically shut off in 2 to 5 seconds and the play button will unlatch and return to up position.

- Depress "Rewind" Button. The pinchwheel should be away from the capstan, and the supply reel should rotate clockwise at high rate of speed and should resist being stopped by finger pressure. The take-up reel will stop rotating, but should turn freely when rotated by finger.

  Note: Because of the automatic end-of-tape feature the unit shut off in 2-5 seconds.

- Depress "Fast Forward" Button. The take-up reel should rotate rapidly counterclockwise. It should resist being stopped by finger pressure and the supply should rotate freely when turned by finger.

  Note: Because of the Automatic End-of-Tape feature the unit should shut off in 2-5 seconds if the take-up reel is stopped from rotating.

- With the cassette lid remaining open, slightly lift upward on record interlock lever located above supply reel and depress the "Record" button, both Record and Play buttons should latch. The unit should operate the same as in the Play position.

- Stop button when depress in any mode should stop operating of unit and the button will release to up position.

- Eject button when depress will operate the same as the stop button and cassette lid will open.

- Pause button is a mechanical pause and when depressed will pull pinchwheel plus both tape heads away from capstan in Record and Play modes only.

CABINET FRONT REMOVAL

1. Remove Volume, Balance, Bass, Treble, Band, and Tuning control knobs.
2. Depress Eject button to open cassette lid.
3. With Cassette lid, pull upward on Cassette door (ref. no. A-10) and remove from unit. Close cassette door frame (ref. No. B1-2).
4. Remove Battery/Storage compartment door.
5. Remove light (8) cabinet front mounting screws:
   Two (2) located in battery compartment.
   Six (6) located on cabinet back.
6. Carefully separate cabinet front from cabinet back.

Note: For easier servicing of unit, disconnect speaker plug from cabinet front.

TO SERVICE MAIN CIRCUIT BOARD

1. Remove two (2) main circuit board mounting chassis mounting screws:
   One (1) located near left internal microphone.
   One (1) located near right internal microphone.
2. Lift upward on main circuit board assembly to remove from cabinet back for servicing.

TO SERVICE MLS CIRCUIT BOARD

1. Perform "To Service Main Circuit Board", steps (1 & 2).
2. Remove one (1) mounting screw from conductor side of MLS Circuit Board.
3. Remove MLS circuit board for servicing.

TO SERVICE POWER SUPPLY BOARD

1. Remove AC power cord from unit.
2. Remove two (2) AC power/External DC power jack mounting screws.
3. Remove power supply board for servicing.

TO SERVICE TAPE MECHANISM

" Parts Above Baseplate"

1. Depress eject arm to open cassette lid.
2. Unfasten two (2) Deck chassis cover mounting tabs and remove deck chassis cover from unit.

" Parts Below Baseplate"

1. Remove two (2) Tape deck (ref. No. B1-1) mounting screws:
   One (1) located to left side of Eject Arm.
   One (1) located to right side of tape counter mounting bracket.
2. Remove tape mechanism assembly from unit.

Note: For easier servicing of unit it maybe desirable to disconnect the three plugs from Tape Deck circuit board and Play-Record/Erase head plug from main circuit board.

TO SERVICE TAPE DECK CIRCUIT BOARD

1. Perform "To Service Tape Mechanism - Parts Below Baseplate", steps (1 & 2).
2. Remove One (1) Tape Deck circuit board mounting screw.
3. Lift upward on circuit board to expose component side of board.

TO REPLACE COUNTER BELT

1. Perform "To Service Tape Mechanism - Parts Above Baseplate", steps (1 & 2).
2. Remove and replace defective counter belt.

TO REPLACE DRIVE BELT

1. Perform "To Service Tape Mechanism - Parts Below Baseplate", steps (1 & 2).
2. Remove Flywheel thrust adjustment screw (ref. No. 104) and thrust spring (ref. No. 87).
3. Slightly raise upward on flywheel housing (ref. No.90) to remove and replace defective drive belt.

TO REPLACE DRIVE BELT - Cont'd.

4. Replace thrust spring and Flywheel thrust adjustment screws.
5. Perform "Flywheel thrust Adjustment" procedure.

TO REPLACE TAKE-UP BELT

1. Perform "To Service Tape Mechanism - Parts Below Baseplate", steps (1 & 2).
2. Remove Flywheel Thrust adjustment screw and four (4) Flywheel housing (ref. No. 90) mounting screws located on same side of tape mechanism as motor assembly.
3. Remove Flywheel housing and drive belt.
4. Slightly raise upward on flywheel just for enough to remove and replace defective take-up belt.
5. Reassemble parts and perform "Flywheel Thrust Adjustment" procedure.

SERVICE ADJUSTMENTS

Before aligning or adjustment tape mechanism, wipe off any dirt or lubrication accumulated (with denatured alcohol) around any surface where tape comes in contact, and all rotating drive surfaces.

LUBRICATION

The mechanical parts are factory coated with a thin coat of light grease and should not necessarily require further lubrication. If a light grease is applied, use caution not to get any grease on the record and eraseheads, hubs, pulleys, drive belts, tape reels or selector switch. Use a good grade of lubricant such as G.E. Silicone Lube G322L or Lubriplate (00).

FLYWHEEL THRUST ADJUSTMENT

1. Perform "To Service Tape Mechanism - Part Below Baseplate", steps (1 & 2).
2. Be sure tape mechanism is in Stop mode.
3. While moving the flywheel/capstan up and down, slowly turn the thrust adjustment screw (ref. No. 104) clockwise to obtain a clearance of 0 between flywheel bearing and flywheel housing. NOTE: DO NOT OVERTIGHTEN SCREW.
4. Turn thrust adjustment screw counterclockwose approximately 1/2 turn.
5. After adjustment, secure thrust adjustment in place with cement or paint.

PINCHWHEEL PRESSURE

No adjustment determined by pinchroller spring should be sufficient to give adequate and constant pull force eliminating tape "walking and wrinkling" while providing minimum current drain consistent with these objectives.

MECHANICAL TORQUES

Take-up Torque	. . . .	35 to 65 gm-cm
Rewind Torque	. . . .	55 gm-cm min.
Fast Forward Torque	. . . .	55 gm-cm min.

LOCKED SPINDLE TEST

Because of the difficulty of measuring actual torques in gram-centimeters, it is sometimes possible to obtain an indication of proper torque by placing the unit in each mode and grasping the driven spindle with your fingers. Look for current drain increases as follows:

Locked take-up spindle, PLAY or REC	. . .	3 to 8 mA
Locked take-up spindle, FAST FWD.	. . .	60 to 140 mA
Locked supply spindle, REWIND	. . .	60 to 140 mA

Note: Due to Automatic End-of-Tape shut off in all modes, manual hold the button down to defeat shut-off feature.

TAPE HEAD SERVICING

Each time the unit is serviced, the face of both tape heads should be thoroughly cleaned with denatured alcohol or commercial head cleaning solution. The REC/PLAY head should be demagnetized with a commercial demagnetizer. Accumulation of tape oxide during normal operation can cause problems, including loss of Highs and Wow & Flutter.

PLAY RECORD HEAD AZIMUTH ADJUSTMENT

Adjustment of Play/Record azimuth screw is accessible thru a small slot located above "Rewind" button. Adjust head azimuth screw as follows:

1. Insert 6 KHz section, side 2 of Hartak Mark XII test tape or an equivalent 6 KHz test tape.
2. Connect a VTVM with a 4Ω dummy load to left or right external speaker jack and play back test tape.
3. The Play/Record head is aligned by tuning the azimuth screw so that the indicator on the VTVM shows the highest output.
4. Secure azimuth screw with paint or glue after adjustment.

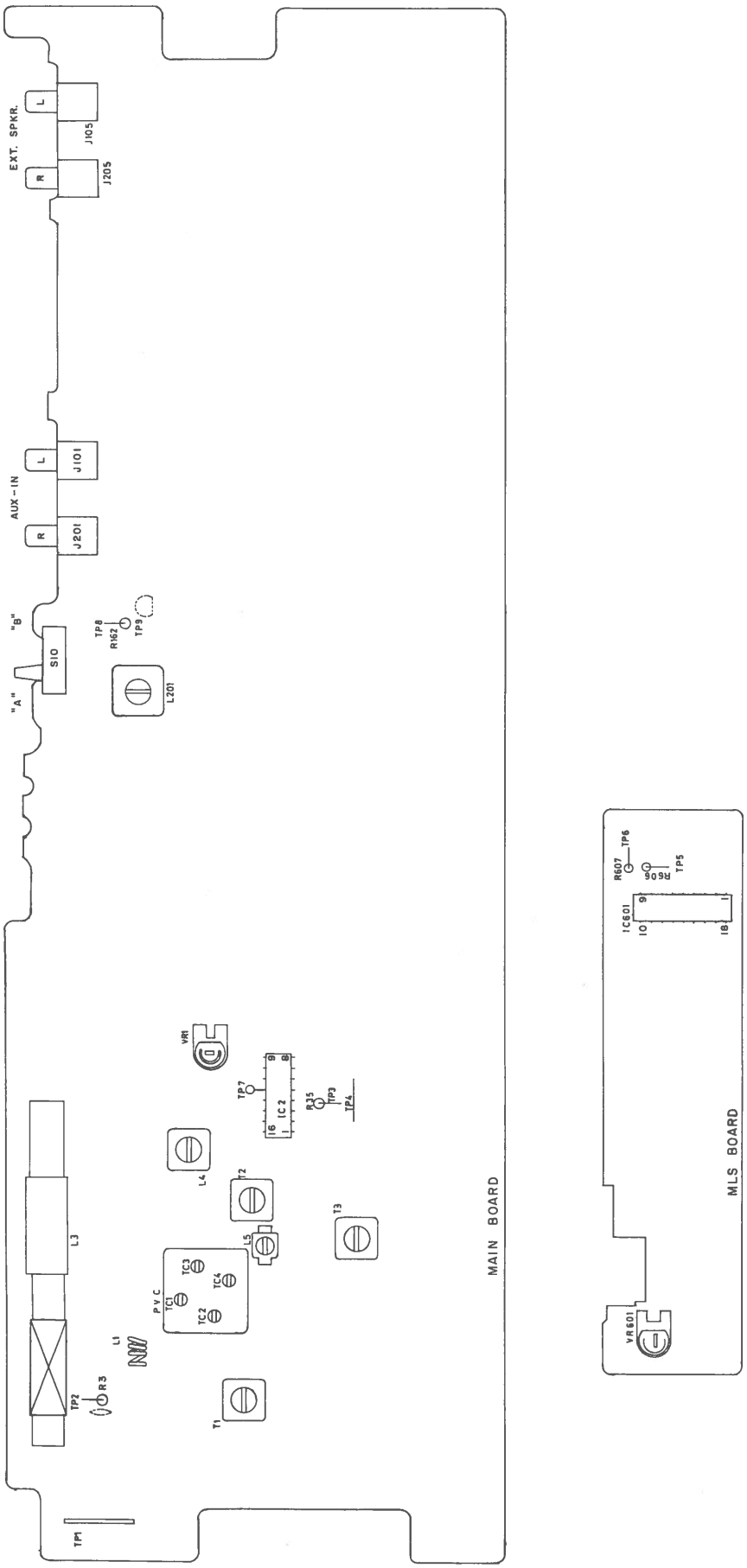
TAPE SPEED ADJUSTMENT

Adjustment of tape speed potentiometer is accessible thru a small hole located in AC Power Cord storage compartment. Adjust tape speed potentiometer as follows:

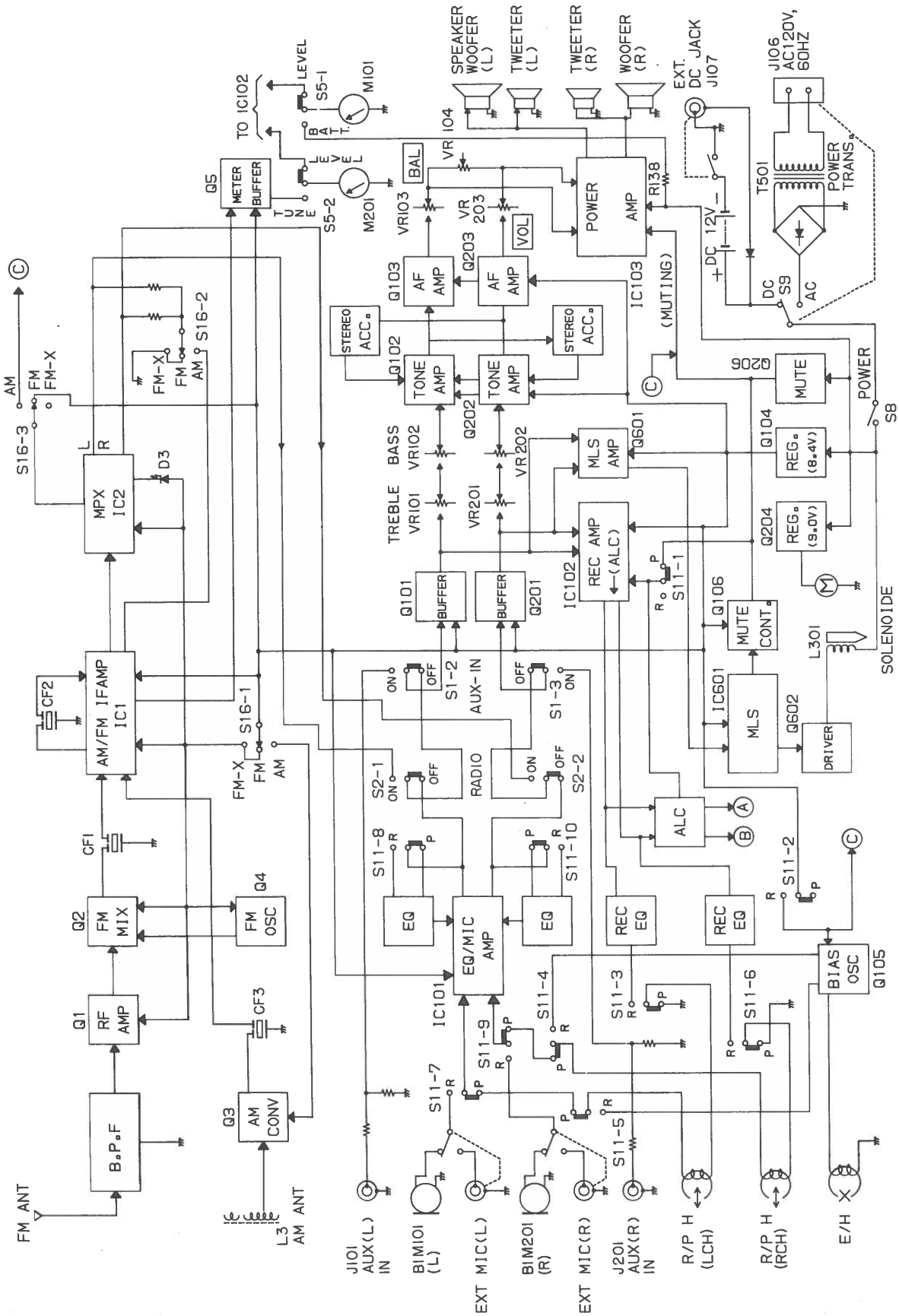
1. Remove battery compartment door.
2. Connect a frequency counter with a 4Ω dummy load to left or right external speaker jack.
3. Insert and play back 3 KHz section, side 2 of Hartak Mark XII test tape or equivalent 3 KHz test tape.
4. Insert an alignment tool and adjust tape speed potentiometer located bottom side of motor until frequency counter indicated 3 KHz±3%.

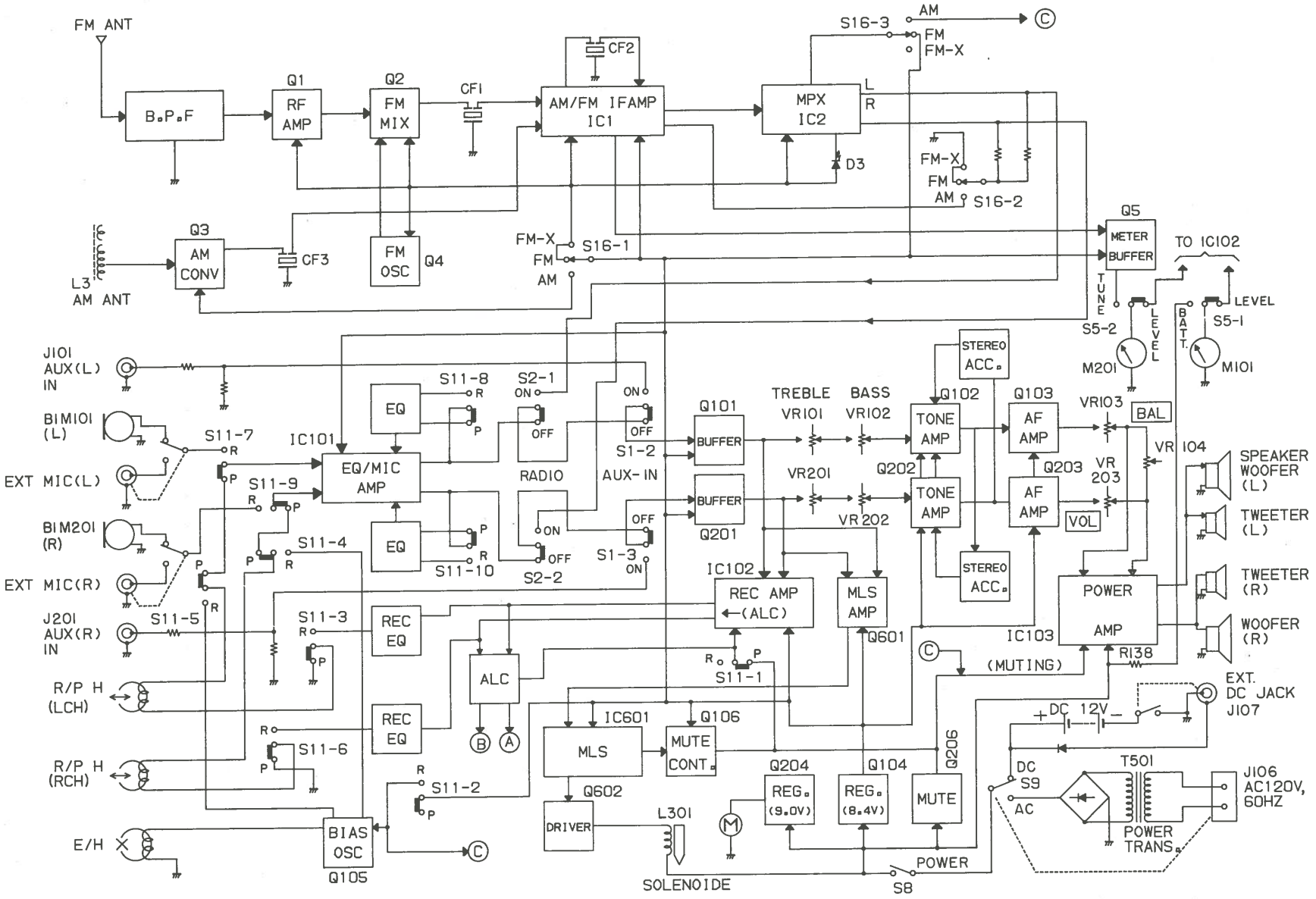
RECORD BIAS OSC. FREQUENCY ADJUSTMENT

1. It first will be necessary to perform "Cabinet Front Removal" steps (1-6) and "Service Main Circuit Board", steps (1-2).
2. Prior to alignment, place the following controls and switches to position indicated below:
   - Function switch to "Tape"
   - Tape select switch to "Normal"
   - Place Oscillator switch to "A" position
   - Place unit in "Record" mode
3. Connect a frequency counter to TP9 and adjust L201 until frequency counter indicates 85.5 KHz.



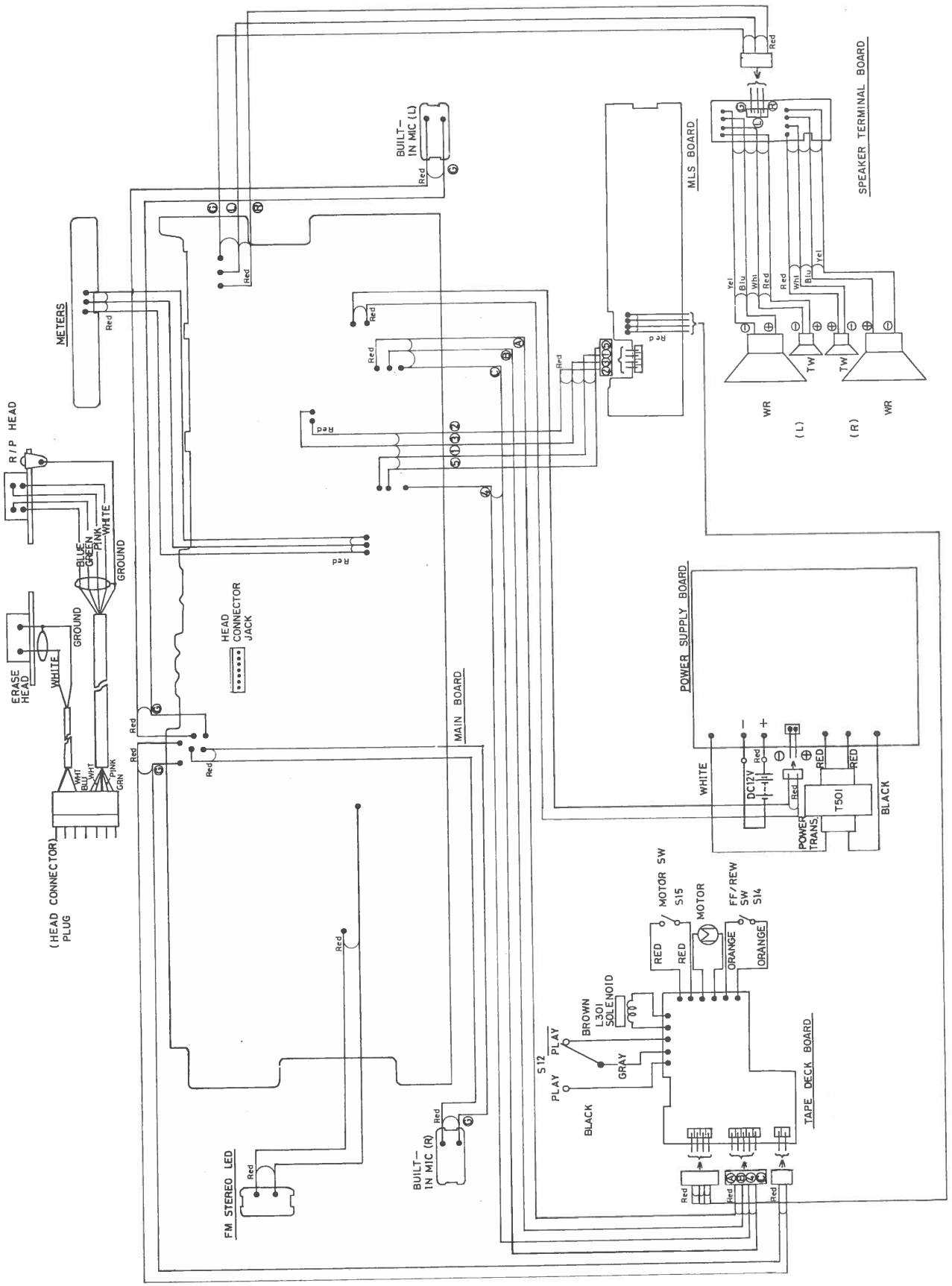
ALIGNMENT TEST POINTS & COMPONENT LOCATION 3-5259A


BLOCK DIAGRAM 3-5259A
FM ANT
AM ANT
L3
B.P.F
Q1 RF AMP
Q2 FM MIX
Q3 AM CONV
Q4 FM OSC
Q5 METER BUFFER
CF1
CF2
CF3
AM/FM IFAMP IC1
MPX IC2
D3
S16-1
S16-2
S16-3
FM-X
FM
AM
L
R
TO IC102
LEVEL
TUNE
S5-1
S5-2
M101
M201
VR103
VR 203
VOL
BAL
VR 104
Q103 AF AMP
Q203 AF AMP
Q102 TONE AMP
Q202 TONE AMP
STEREO ACC.
BASS VR102
VR202
TREBLE VR101
VR201
Q101 BUFFER
Q201 BUFFER
IC102 REC AMP (ALC)
Q601 MLS AMP
IC103 (MUTING)
POWER AMP
R138
SPEAKER WOOFER (L)
TWEETER (L)
TWEETER (R)
WOOFER (R)
EXT. DC JACK J107
J106 AC120V, 60HZ
T501 POWER TRANS.
DC 12V
DC
AC
S9
POWER
S8
Q206 MUTE
Q104 REG. (8.4V)
Q204 REG. (9.0V)
Q106 MUTE CONT.
L301 SOLENOIDE
IC601 MLS
Q602 DRIVER
ALC
REC EQ
REC EQ
EQ
EQ
EQ/MIC AMP
IC101
BIAS OSC Q105
S1-1
S1-2
S1-3
S2-1
S2-2
S11-1
S11-2
S11-3
S11-4
S11-5
S11-6
S11-7
S11-8
S11-9
S11-10
AUX-IN
RADIO
ON
OFF
J101 AUX(L) IN
BIM101 (L)
EXT MIC(L)
BIM201 (R)
EXT MIC(R)
J201 AUX(R) IN
R/P H (LCH)
R/P H (RCH)
E/H
ERASE HEAD
R/P HEAD



BLOCK DIAGRAM 3-5259A

INTERCONNECTING WIRING DIAGRAM 3-5259A



GENERAL ELECTRIC

ALIGNMENT PROCEDURE

AM ALIGNMENT - FUNCTION SWITCH IN RADIO POSITION AND BAND SWITCH IN AM

AM Generator - RF Radiated Signal Modulated 30% at 400Hz to AM Antenna (L3). Use only enough signal for indication.

	GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1.	455 KHz	Low End	Output Meter Across Speaker or Speaker Jack	T2, T3 (AM IF)	Adjust for maximum. Repeat until no further improvement is noted.
2.	505 KHz	Low End		L4 (Osc. Coil)	Adjust for maximum.
3.	1650 KHz	High End		TC4 (Osc. Trim)	Adjust for maximum while rocking gang. Repeat steps 2 & 3.
*4.	600 KHz	Tune to Signal		L3 (Antenna)	Slide tank coil along core to obtain maximum output. Wax or cement tank coil to core.
5.	1400 KHz	Tune to Signal		TC3 (Ant. Trim)	Adjust for maximum. Repeat steps 4 & 5 until no further improvement is noted.

*Only perform Step 4 if L3 has been replaced or tank coil is loose on core

FM ALIGNMENT - FUNCTION SWITCH IN RADIO AND BAND SWITCH IN FM

High Side of FM Sweep Generator thru a .01 MF capacitor in series with a 68Ω resistor to TP1. (Use only enough signal 1000Hz @ 22.5KHz deviation for indication).

	GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1.	10.7 MHz	High End	Scope at TP3	T1 (FM IF)	Adjust for maximum gain and symmetrical S-curve. Center 10.7MHz marker and repeat.

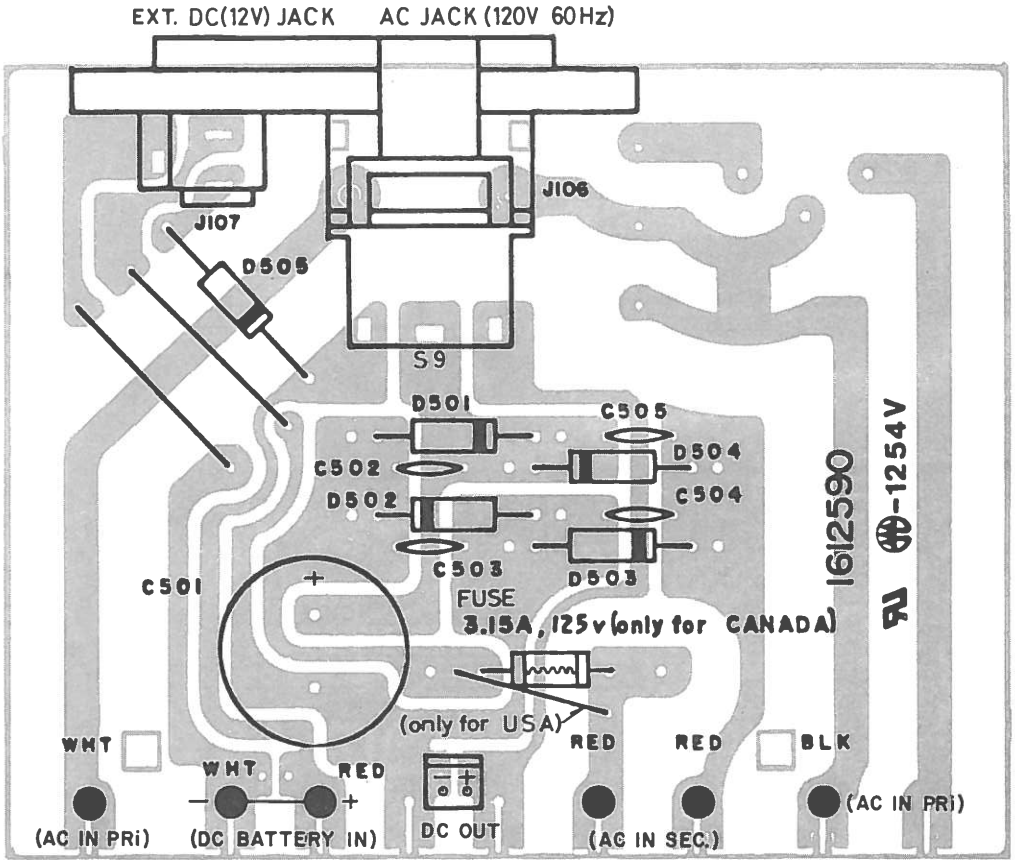
FM Generator - Modulated RF Radiated Signal to FM Whip Antenna. (TP1)

2.	87.2 MHz	Low End	Output Meter Across Speaker or Speaker Jack	L5 (Osc. Coil)	Adjust for maximum.
3.	109.0 MHz	High End		TC2 (Osc. Trim)	Adjust for maximum. Repeat steps 2 & 3.
4.	88.0 MHz	Tune to Signal		L1 (Rf Coil)	Spread or compress coil winding slightly to obtain optimum alignment.
5.	108.0 MHz	Tune to Signal		TC1 (Rf Trim)	Adjust for maximum. Repeat steps 4 & 5.

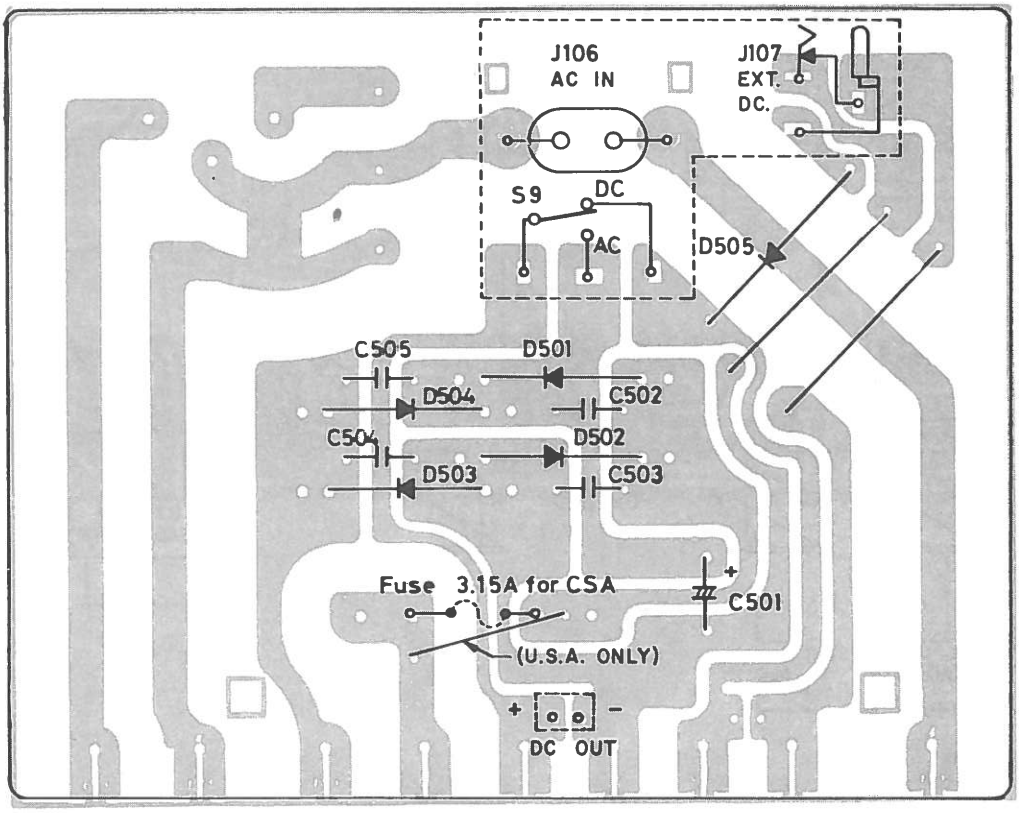
FM MPX ALIGNMENT - FUNCTION SWITCH IN RADIO POSITION AND BAND SWITCH IN FM STEREO

19 KHz ALIGNMENT - FM GENERATOR TO WHIP ANTENNA. (TP1)

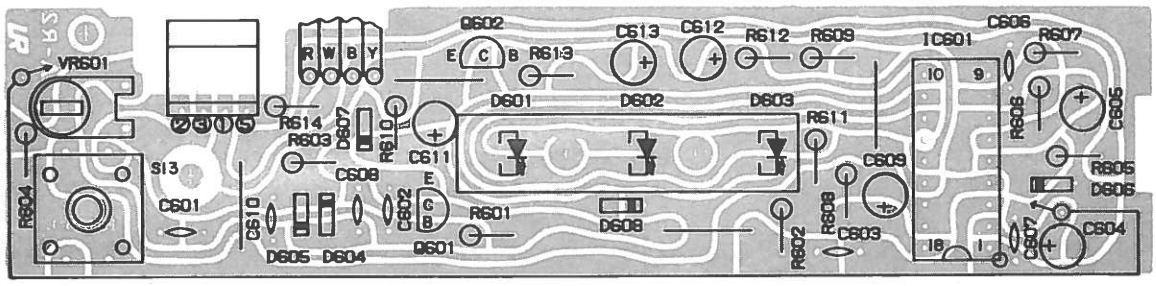
1.	98 MHz w/19 KHz pilot or tune to a strong FM station broadcasting a 19 KHz pilot.	Tune to Signal	Frequency Counter to TP7	VR1	Adjust for 19.0KHz



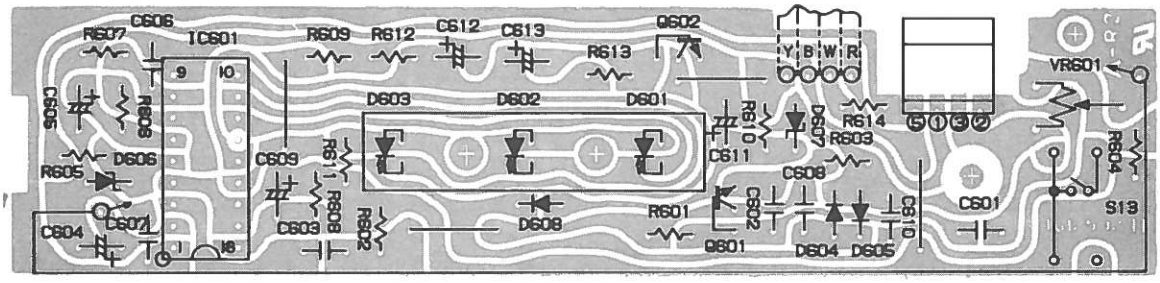
COMPONENT LAYOUT — POWER SUPPLY BOARD (BOTTOM VIEW)
3-5259A



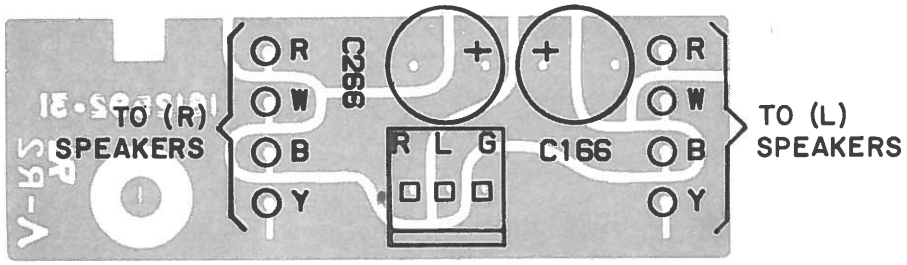
WIRING DIAGRAM — POWER SUPPLY BOARD (TOP VIEW) 3-5259A



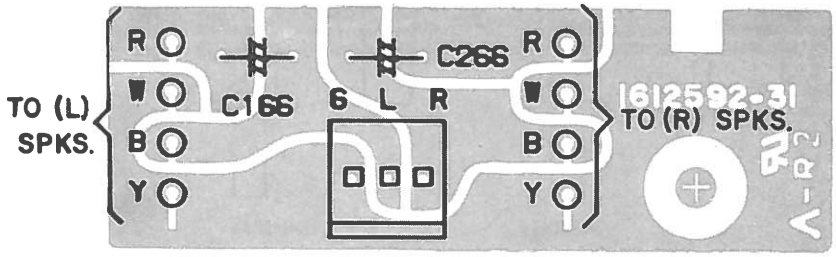
COMPONENT LAYOUT — MLS BOARD (TOP VIEW) 3-5259A



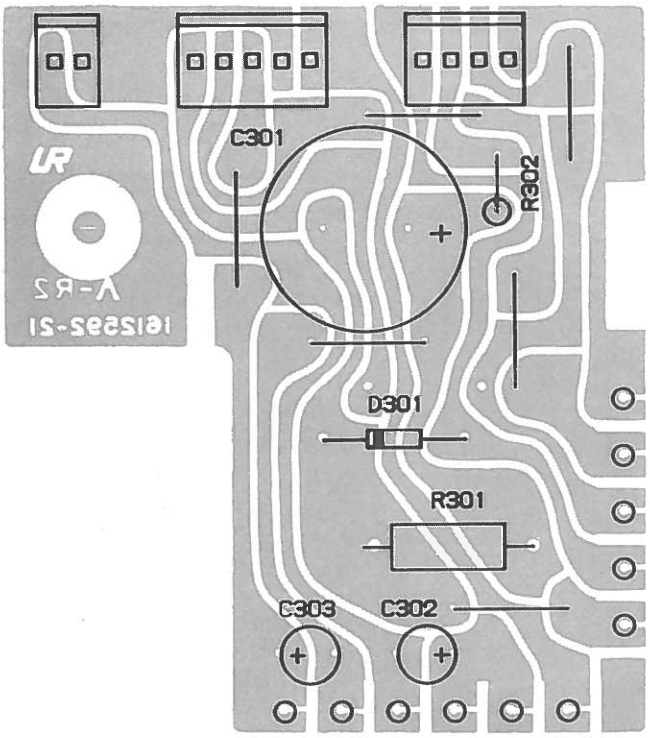
WIRING DIAGRAM — MLS BOARD (BOTTOM VIEW) 3-5259A



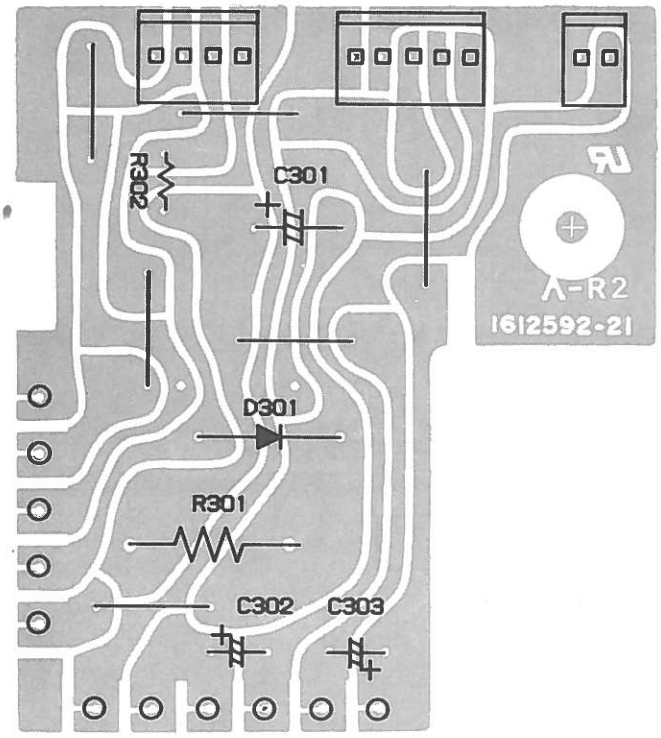
SPEAKER TERMINAL BOARD (TOP VIEW) 3-5259A



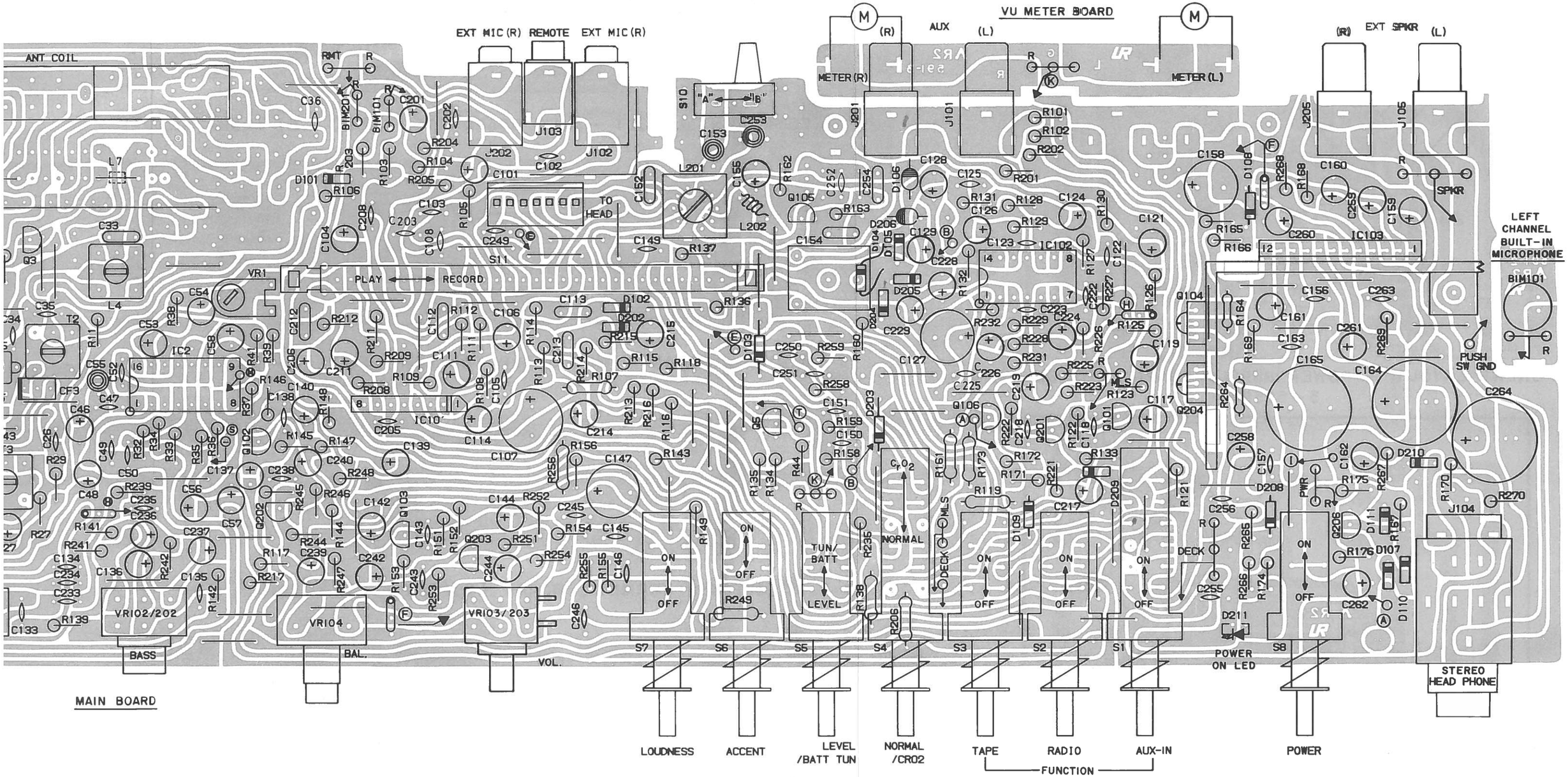
SPEAKER TERMINAL BOARD (BOTTOM VIEW) 3-5259A



COMPONENT LAYOUT – TAPE BOARD (TOP VIEW) 3–5259A

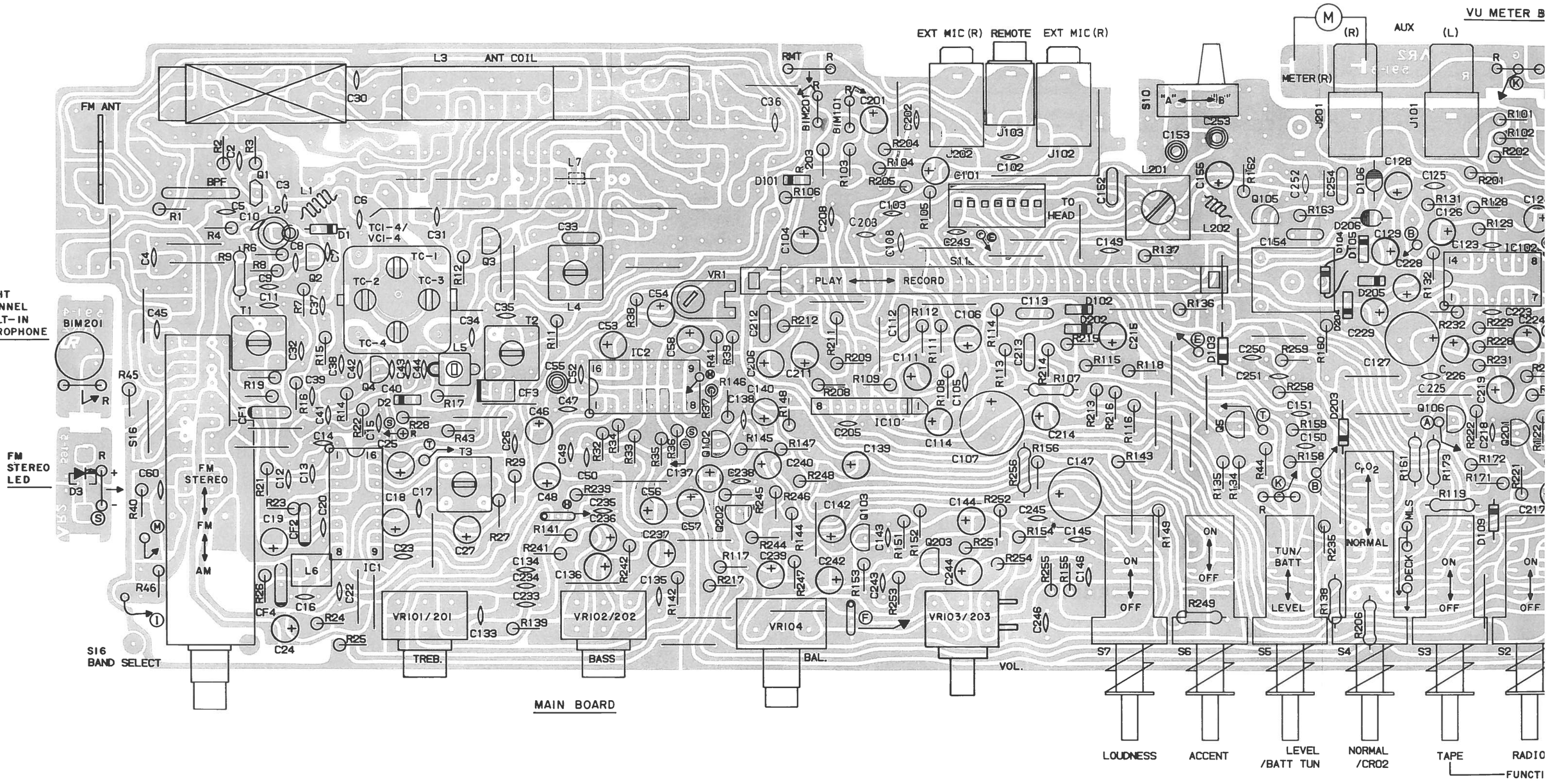


WIRING DIAGRAM – TAPE BOARD (BOTTOM VIEW) 3–5259A



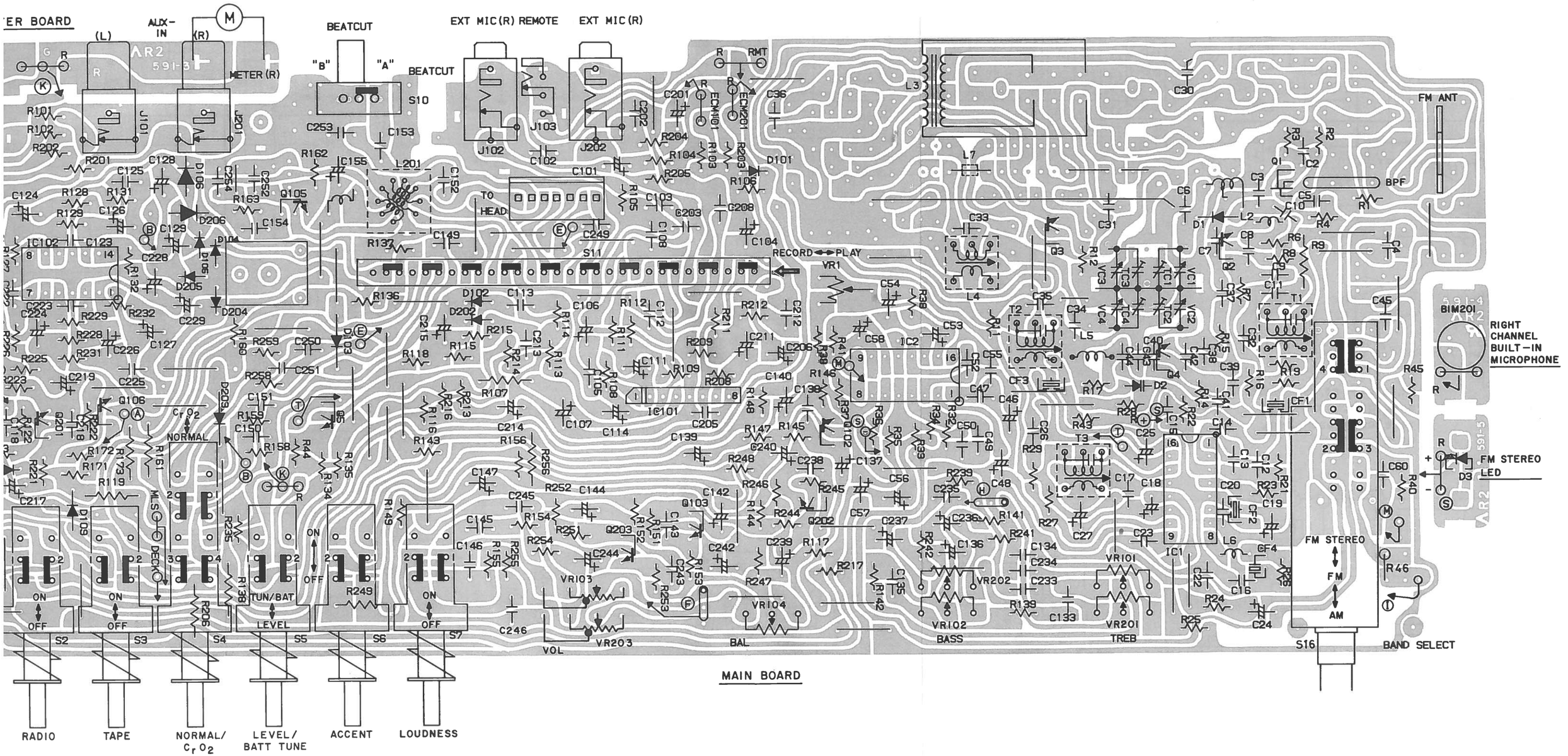
COMPONENT LAYOUT – MAIN BOARD (TOP VIEW) 3-5259A

GENERAL ELECTRIC MODEL 3-5259A

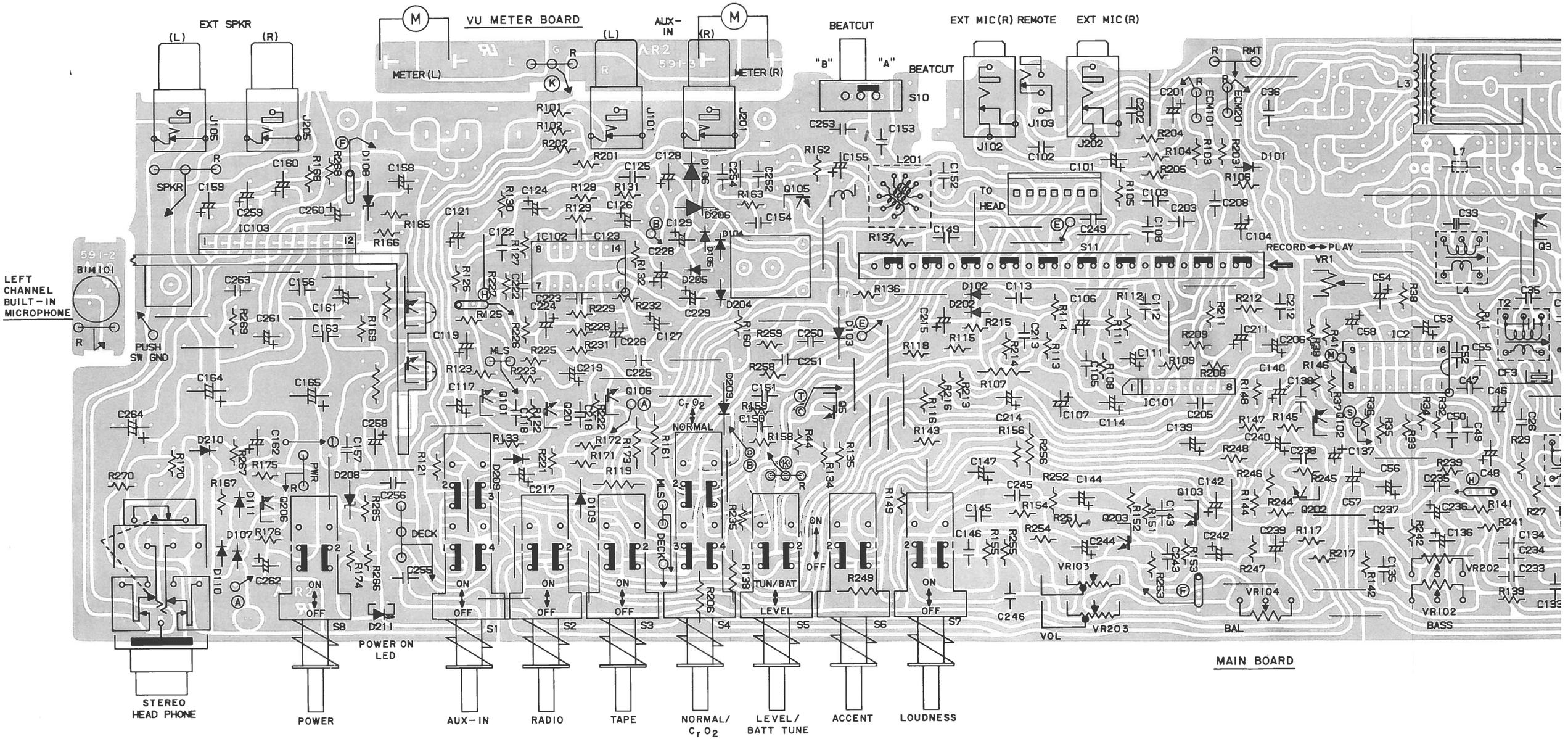


COMPONENT LAYOUT — MAIN BOARD (TOP VIEW) 3-5259A

GENERAL ELECTRIC MODEL 3-5259A



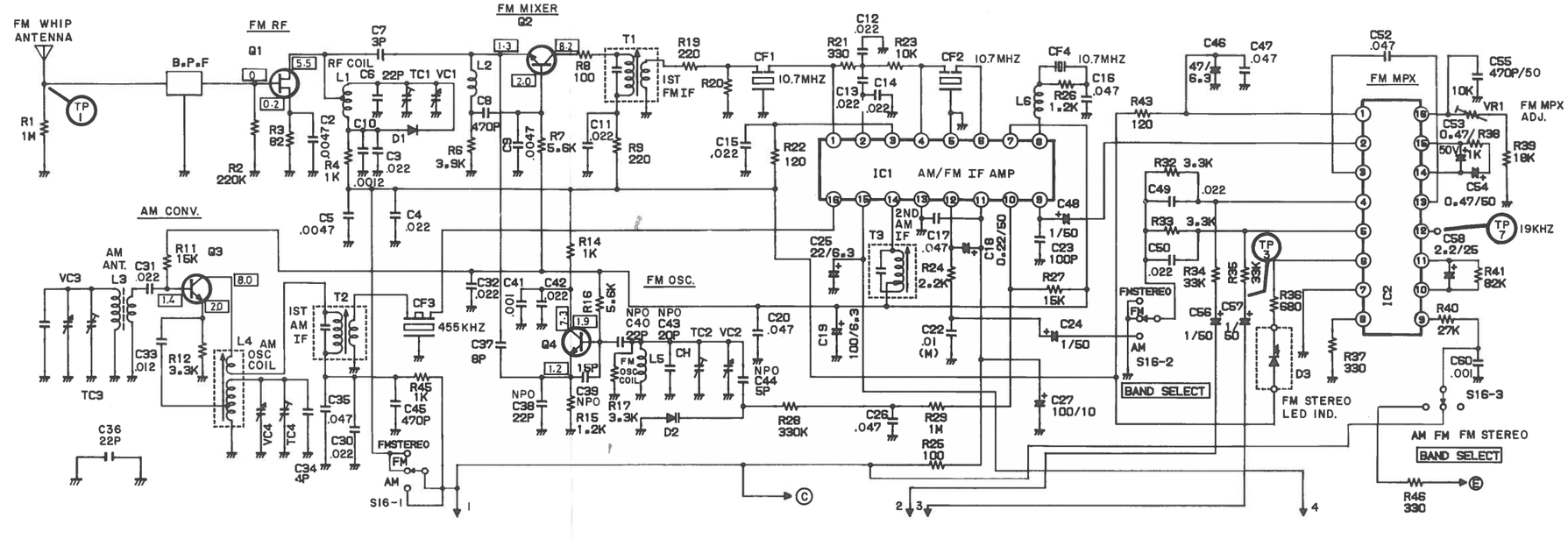
WIRING DIAGRAM — MAIN BOARD (BOTTOM VIEW) 3-5259A



WIRING DIAGRAM — MAIN BOARD (BOTTOM VIEW) 3-5259A

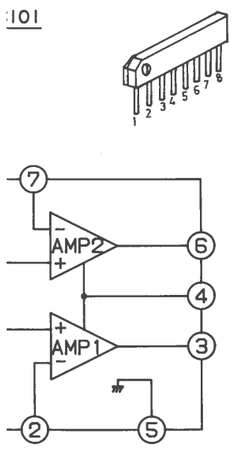
IC PIN DC VOLTAGES

3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
0	2.04	0	1.33	2.06	2.04	2.4	3.02	7.47	0.47	0	2.06	0.26	0.87		
.8	7.87	0	1.29	2.02	2.01	2.16	2.42	7.47	0.32	0	2.03	0.29	0.86		
.01	1.46	1.5	6.82	0	0	0.3	0	1.66	1.65	1.62	1.66	1.66	1.9		
2.3	6.33	0	2.3	0.76	1.3										
.36	0	1.18	0	0.4	0	0	1.18	0	2.36	1.6	1.6				
5.5	0.43	0	0.64	8.8	16.8	6	17.1	16.8	8.36						
.93	8.3	6.89	0	0	0	0	8.3	0 (8.3)	0 (8.3)	0	7.8	0	8.3	8.3	8.2
0.9	9.35	1.4	0	0	0	0	0	0	0	0	0	0.74	8.35	8.35	0

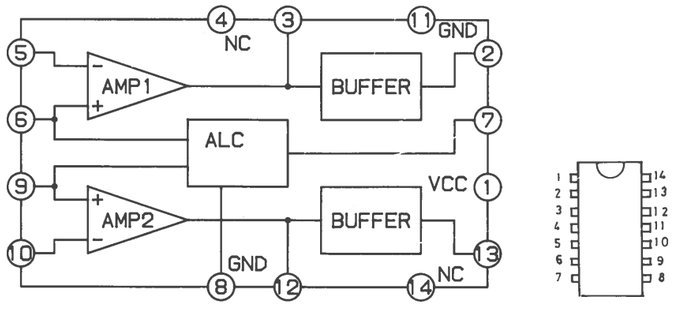


SCHEMATIC DIAGRAM - TUNER SECTION 3-5259A

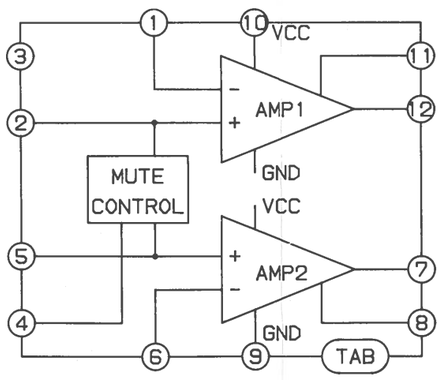
IC101



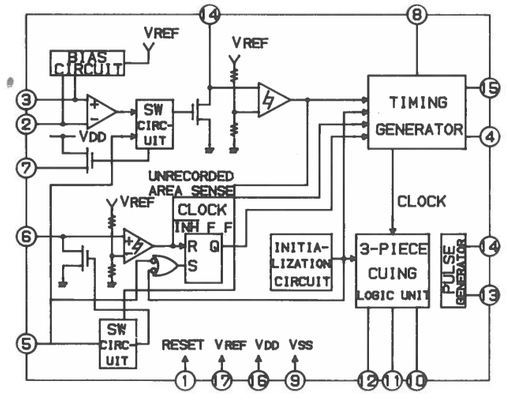
IC102



IC103

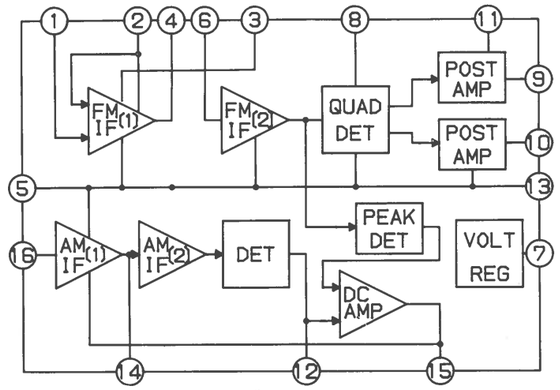


IC601



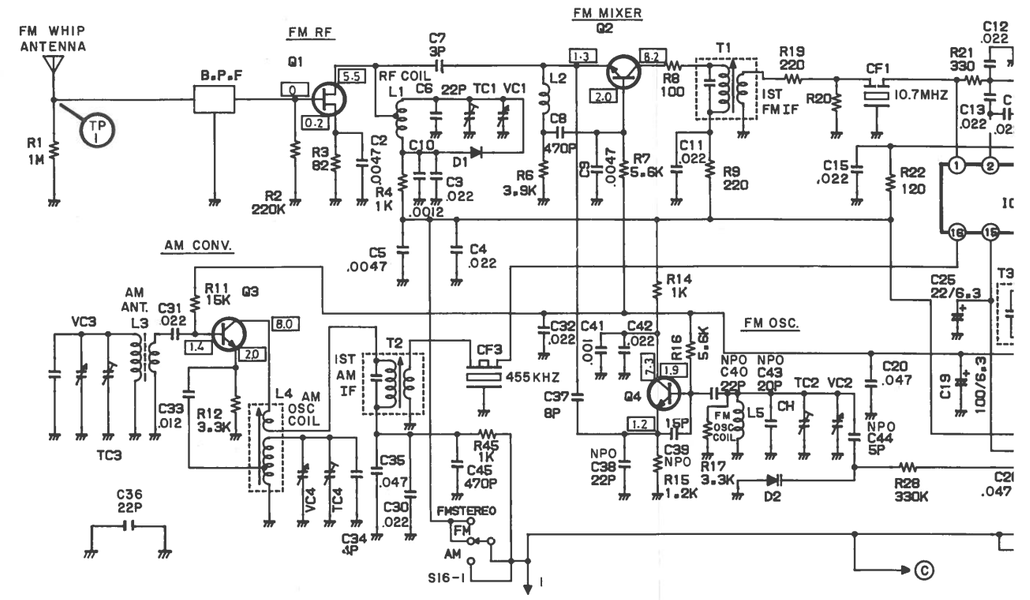
GENERAL ELECTRIC MODEL 3-5259A

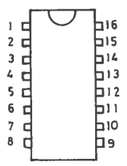
IC1



IC PIN DC VOLTAGES

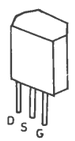
IC NO. / PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
IC1(AM)	1.4	1.4	10	2.04	0	1.33	2.06	2.04	2.4	3.02	7.47	0.47	0	2.06	0.26	0.87		
IC1(FM)	1.8	1.8	1.8	7.87	0	1.29	2.02	2.01	2.16	2.42	7.47	0.32	0	2.03	0.29	0.86		
IC 2	7.05	1.5	2.01	1.46	1.5	6.82	0	0	0.3	0	1.66	1.65	1.62	1.66	1.66	1.9		
IC101	1.3	0.76	2.3	6.33	0	2.3	0.76	1.3										
IC102	7.1	1.6	2.36	0	1.18	0	0.4	0	0	1.18	0	2.36	1.6	1.6				
IC103	0.64	0	6.5	0.43	0	0.64	8.8	16.8	6	17.1	16.8	8.36						
IC601 (OP)	0	1.1	0.93	8.3	6.89	0	0	0	0	8.3	0 (8.3)	0 (8.3)	0	7.8	6	8.3	8.3	8.2
IC601 (NOP)	6	1.1	0.9	9.35	1.4	0	6	6	6	6	6	6	6	6	0.74	8.35	8.35	6



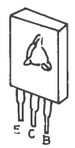


IC1
IC2

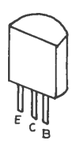
Q1



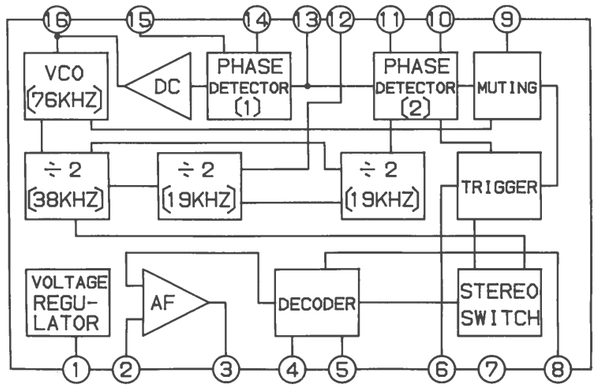
Q104, Q204



Q2, Q3, Q4, Q5, Q101, Q102, Q103, Q105, Q106, Q201, Q202, Q203, Q206, Q601, Q602

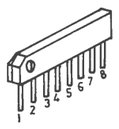


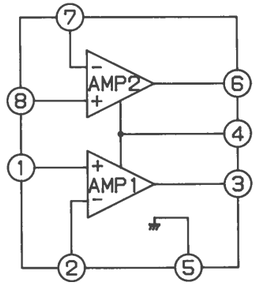
IC2



EQUIVALENT TRANSISTOR & INTEGRATED CIRCUITS

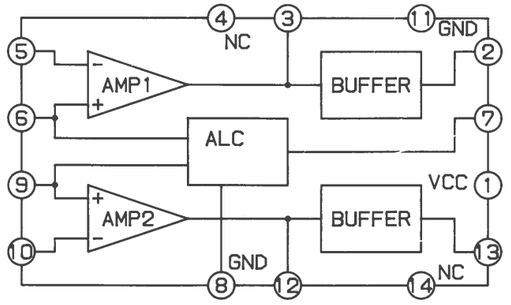
IC101

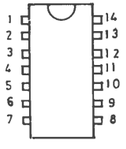




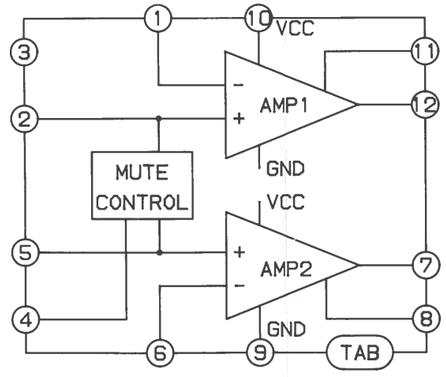
SCHEMATIC DIAGRAM - TUNER SECTION 3-5259A

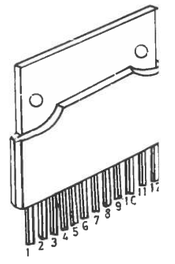
IC102





IC103





GENERAL ELECTRIC

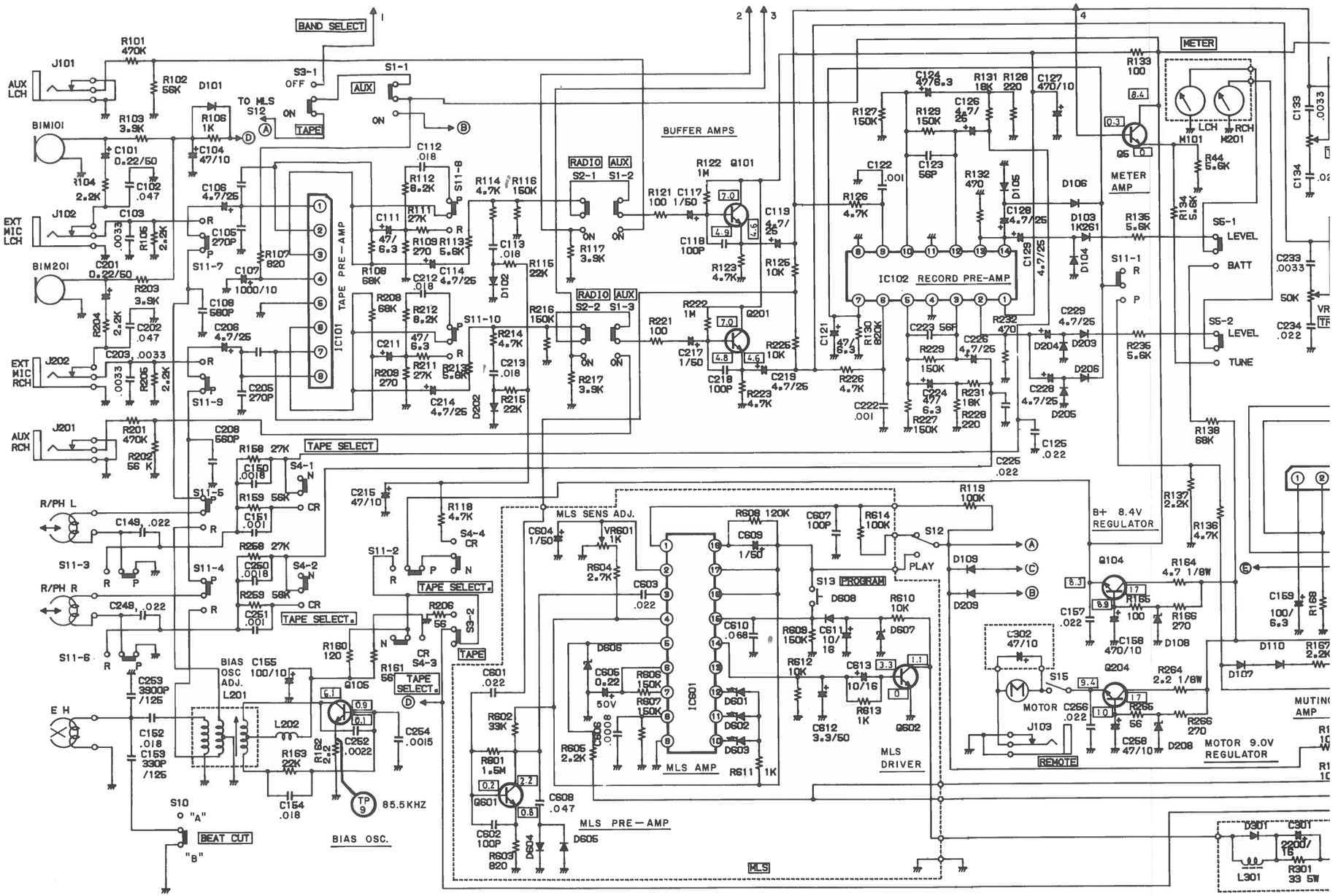
Notes:

1. Unless otherwise specified:
   Capacitors less than 1 = Mf
   Capacitors more than 1 = Pf
   Resistors are in ohms
   K = 1000
   M = 1000000

2. All Voltages are positive with respect to ground with volume at minimum under no signal conditions.

3.

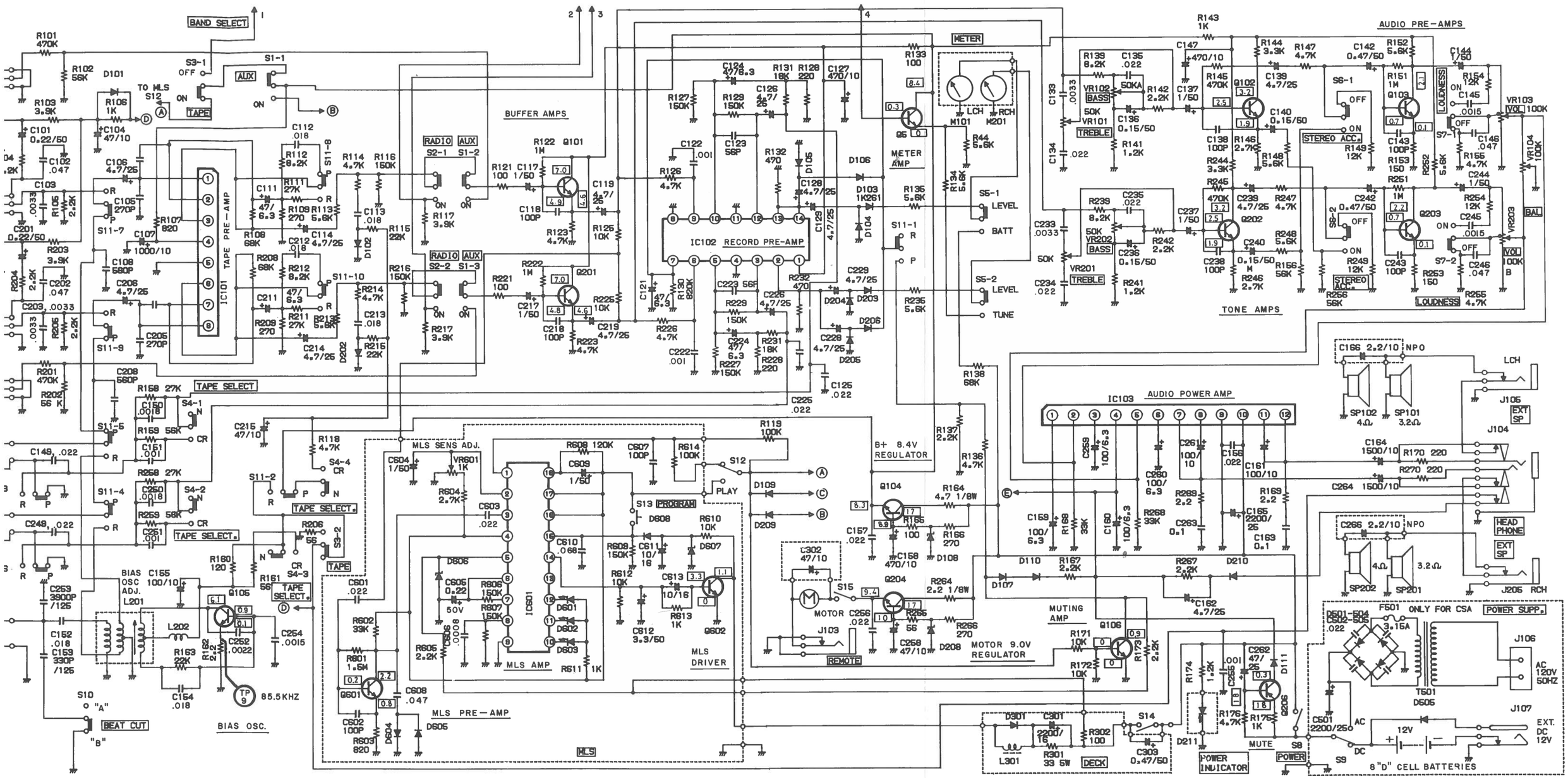
Switches		Position
S1	Aux-in	Off
S2	Radio	Off
S3	Tape	On
S4	Tape select	Normal
S5	Meter	Level
S6	Stereo Accent	Off
S7	Loudness	Off
S8	Power On-Off	Open
S9	AC/DC	DC
S10	Osc. Beat Cut	"B"
S11	Play/Record	Playback
S12	MLS/Play	Play
S13	MLS Selector	Open
S14	Fast Forward/Rewind	Open
S15	Motor power	Open
S16	Band Selector	FM



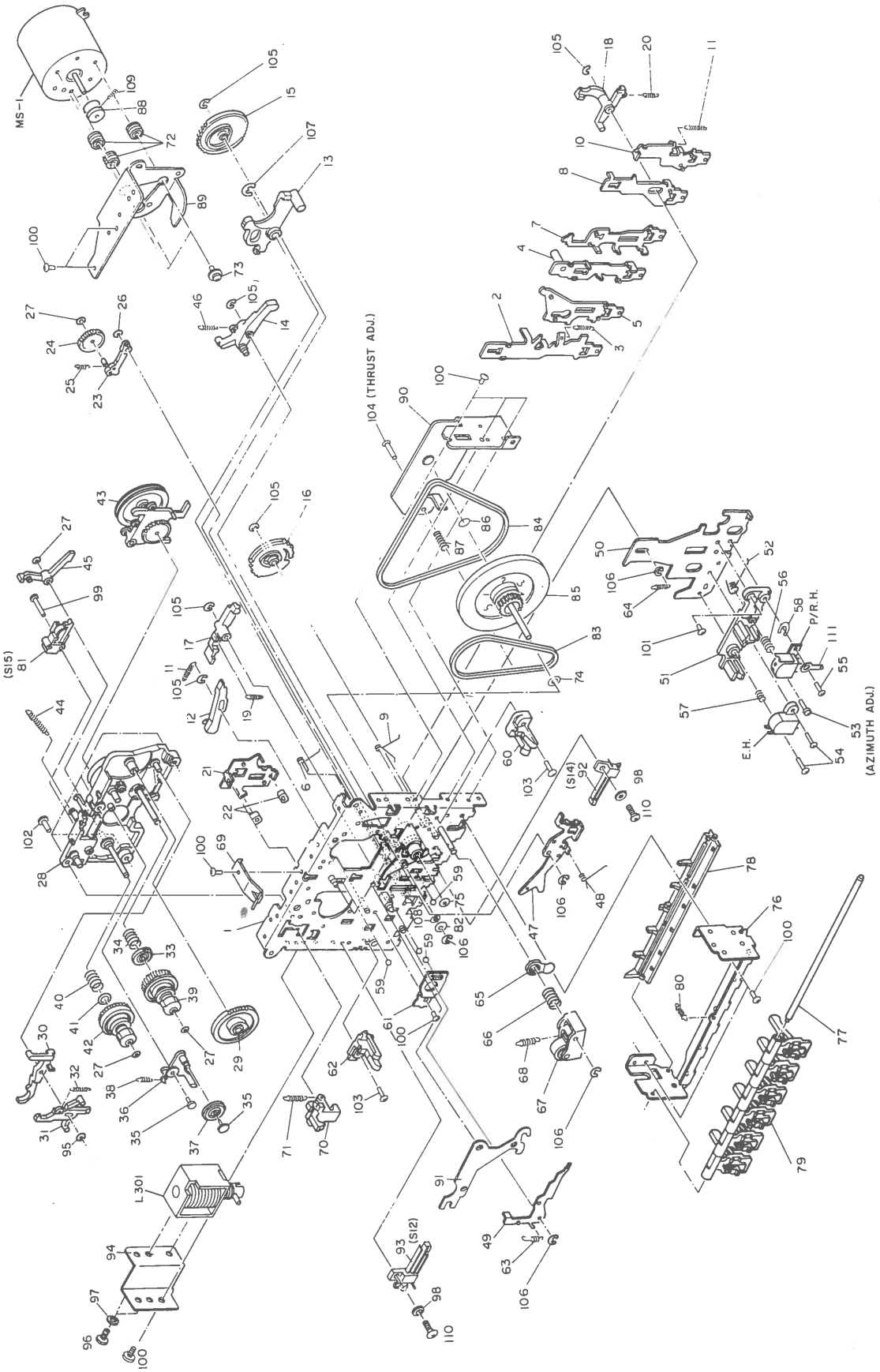
SCHEMATIC DIAGRAM — TAPE & AMPLIFIER 3-52

GENERAL ELECTRIC

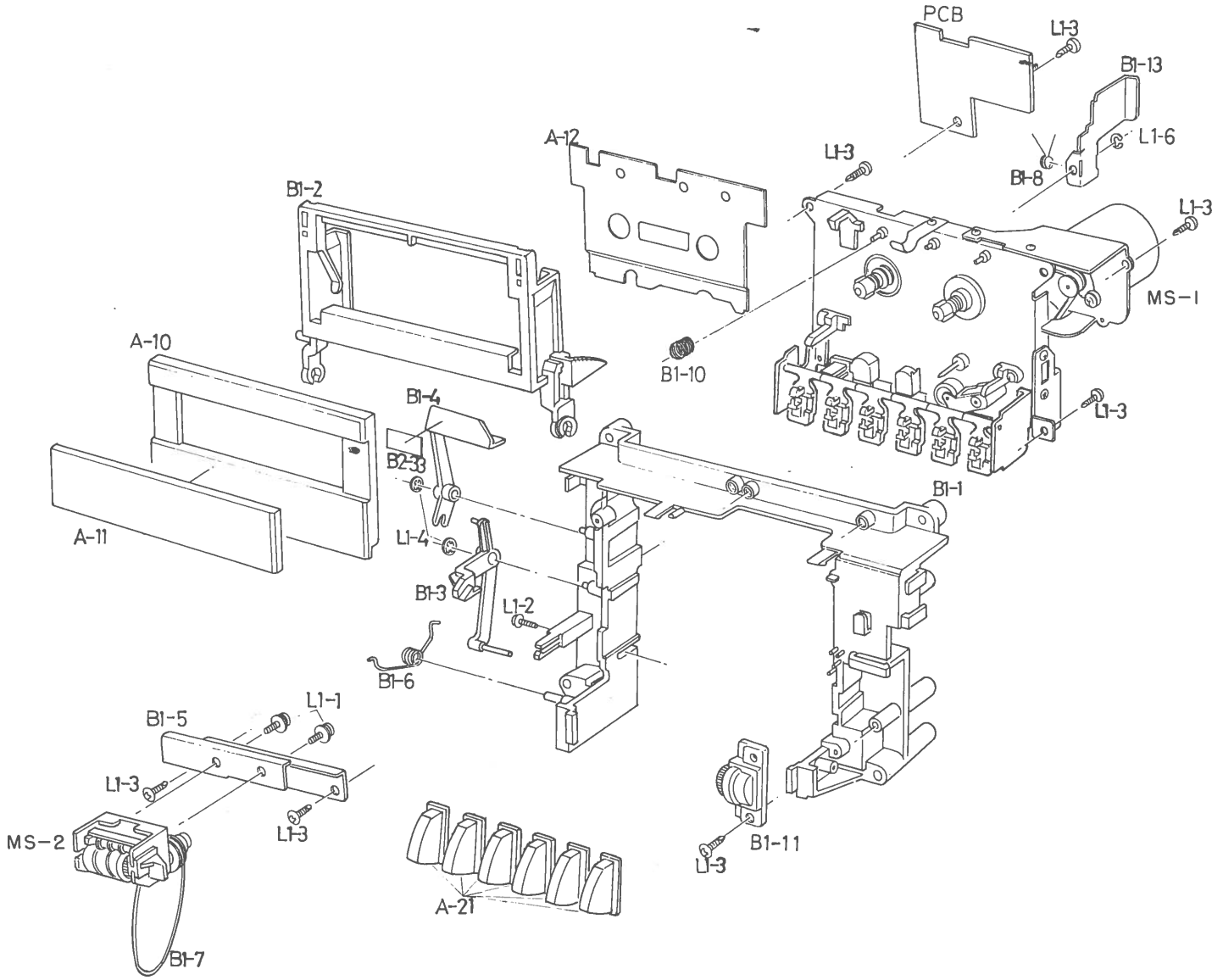
MODEL 3-5259A



SCHEMATIC DIAGRAM — TAPE & AMPLIFIER 3-5259A

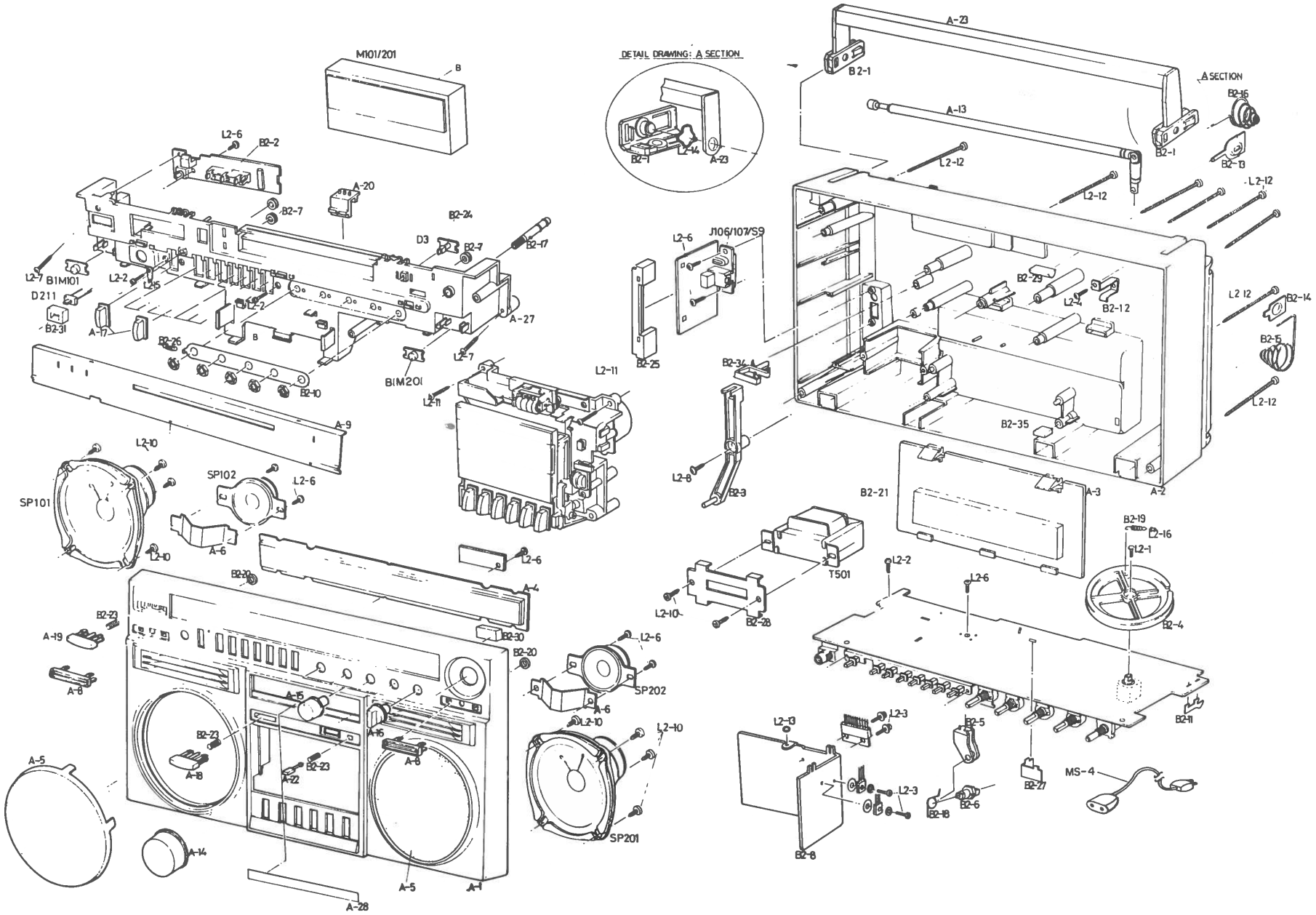


EXPLODED VIEW — TAPE MECHANISM 3-5259A

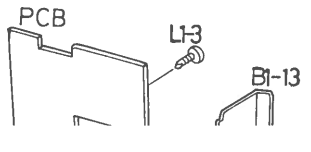


EXPLODED VIEW – TAPE MECHANISM APPEARANCE & CHASSIS ITEMS 3-5259A

GENERAL ELECTRIC



EXPLODED VIEW — CABINET & APPEARANCE ITEMS 3-5259A



REPLACEMENT PARTS LIST MODEL 3-5259A

CAT. NO.	REF. NO.	DESCRIPTION	CAT. NO.	REF. NO.	DESCRIPTION
		CABINET & APPEARANCE ITEMS			
EA98X869	A-1	Cabinet Front Ass'y w/ A-4, Dial crystal A-5, Woofer speaker grille A-8, Microphone grille A-28, Sweep Meter insert B2-20, Microphone cushion B2-30, Counter cushion	EA43X1504	A-18	Eject button
			EA43X1505	A-19	MLS selector button
			EA43X1507	A-22	Counter reset button
			EA78X140	A-23	Handle ass'y.
			EA2X1458	B2-13	Positive Battery contact
			EA2X1459	B2-14	Positive Terminal f/Dual battery contact
EA98X870	A-2	Cabinet Back Ass'y w/ B2-13, Pos. battery contact B2-14, Pos. battery contact B2-15, Neg.battery contact B2-16, Neg.battery contact	EA2X1460	B2-15	Negative battery contact
			EA2X1461	B2-16	Negative terminal f/Dual battery contact
			EA62X289	BIM101	Built-in microphone
			EA62X289	BIM201	Built-in microphone
EA9X618	A-3	Battery/Storage compartment door	EA16X261	D3	FM Stereo LED
			EA16X262	D211	Power On LED
EA90X304	A-4	Dial crystal	EA41X345	J106/107/S9	AC power/Ext. DC power Jack w/AC-DC switch, S9
EA4X890	A-5	Woofer speaker grille			
EA4X891	A-8	Microphone grille	EA62X319	M101/201	Meter
EA4X892	A-6	Tweeter speaker grille	5-1723	MS-3	AC Power Cord
EA82X91	A-13	FM Whip antenna	EA95X199	SP101	Woofer speaker, 3.2Ω,5.5W
EA43X1500	A-14	Tuning Knob	EA95X200	SP102	Tweeter speaker, 4Ω, 6W
EA43X1501	A-15	Volume, Balance, Bass and treble control knobs	EA95X199	SP201	Woofer speaker, 3.2Ω, 5.5W
			EA95X200	SP202	Tweeter speaker, 4Ω, 6W
EA43X1502	A-16	Band selector knob ⚠	EA88X292	T501	AC Power transformer (Canadian Only)
EA43X1503	A-17	Knobs f/Power, Aux-in, Radio, Tape, Meter, Stereo Accent, & Loudness controls ⚠	EA88X294	T501	AC Power transformer (U.S.A. only)
		TAPE MECHANISM APPEARANCE ITEMS			
EA9X619	A-10	Cassette lid door w/ A-11, window	EA1X857	B1-7	Counter belt
			EA5X534	B1-11	Damper Ass'y.
EA2X1475	A-12	Decorative Cover	EA72X90	MS-1	Motor Ass y. w/ 88, pulley 109, set screw
EA43X1506	A-21	Record, Play, Rewind, F.Fwd. Stop, and Pause Knobs			
EA9X620	B1-1	Cassette door holder			
		TAPE MECHANISM			
EA2X1428	15	Gear 'A'	EA39X469	81	Motor On-off switch (S15)
EA2X1429	16	Gear 'B'	EA1X844	83	Take-up Belt
EA2X1430	24	F. Fwd. gear	EA1X845	84	Drive Belt
EA5X513	28	Reel base Ass'y.	EA6X417	85	Flywheel Ass'y.
EA2X1431	29	Auto gear	EA39X506	92	MLS-Play switch, (S12)
EA2X1432	37	Play idler	EA39X507	93	F.Fwd/Rewind switch ,(S14)
EA5X514	39	Take-up reel ass'y.	EA62X295	E.H.	Erase Head
EA5X515	42	Supply reel Ass'y.	EA62X313	L301	Solenoid
EA5X516	43	F/R pulley arm Ass'y.	EA72X90	MS-1	Motor Ass'y. w/ 88, Motor pulley 109, set screw
EA5X517	67	Pinchroller Ass'y.			
EA2X1433	79	Button levers f/Record, Play, Rewind, F.Fwd., Stop and Pause	EA62X294	P/R H	Play/Record Head
		ACCESSORIES			
5-1062		Car Adapter	5-1060		Remote On-Off switch
5-1051		Patch Cord Kit	3-5750		Light weight stereo Headphone
5-1055		Dynamic Pencil microphone w/ on-off switch	5-1849		Light weight stereo Headphone 1/4" adapter
5-1053		Deluxe microphone w/o on-off switch	5-1768		Universal shoulder carrystrap
5-1056		Telephone pick-up	5-1715		Tape Care Kit
			5-1300		Deluxe stereo headphone set

REPLACEMENT PARTS LIST MODEL 3-5259A

ELECTRICAL

CAPACITORS

All capacitors used in this model are non-stocked parts and may be obtained from your local parts jobber.

Electrolitic Capacitors values and DC working voltages are noted on schematic diagram.

Ceramic, Mylar, Styrol and Semicon Capacitor values are noted on schematic diagram and are rate 50 DC working voltage.

	TC1-4/ VC1-4	Tuning Capacitor

RESISTORS & POTENTIOMETERS

All fixed resistors, unless otherwise specified below are carbon composition @ 1/4 Watts, 10% tolerance and may be obtained from your local parts jobber.

	R164	2.2Ω, 1/8W, Carbon type
	R264	2.2Ω, 1/8W, Carbon type
	R301	330Ω, 5W, Wire wound
	VR1	FM MPX Adj., 10K
EA49X628	VR101/201	Treble Control, 50K
EA49X628	VR102/202	Bass Control, 50K
EA49X701	VR103/203	Volume Control, 100K
EA49X702	VR104	Balance Control, 100K
	VR601	MLS Sensitivity Adj., 1K

DIODES

EA16X477	D1	Dump, (S1), BA317
EA16X463	D2	Vari-cap, SD116
EA16X261	D3	FM Stereo LED
EA16X477	D101	Diode, Si, BA317
EA16X477	D102	Switching (S1), BA317
EA16X428	D103	Meter, Ge, 1K261
EA16X428	D104	Meter, Ge, 1K261
EA16X477	D105	ALC, Si, BA317
EA16X507	D106	ALC, Vari-Sta.,KB369
EA16X477	D107	Muting, Si, BA317
EA16X137	D108	Zener, RD9.1EB2
EA16X477	D109	Switching, Si, BA317
EA16X112	D110	Muting, KB265
EA16X477	D111	Muting, Si, BA317
EA16X477	D202	Switching, Si, BA317
EA16X428	D203	Meter, Ge, 1K261
EA16X428	D204	Meter, Ge, 1K261
EA16X477	D205	ALC, Si, BA317
EA16X507	D206	ALC, Vari-Sta., KB369
EA16X184	D208	Zener, RD10EB2
EA16X477	D209	Switching, Si, BA317
EA16X477	D210	Muting, Si, BA317
EA16X262	D211	Power On LED
EA57X14	D301	Diode, Si, 10D1
EA57X14	D501	Rectifier, Si, GP15BL
EA57X14	D502	Rectifier, Si, GP15BL
EA57X14	D503	Rectifier, Si, GP15BL
EA57X14	D504	Rectifier, Si, GP15BL
EA57X14	D505	Rectifier, Si, GP15BL

DIODES - Cont'd.

EA16X265	D601	MLS Program LED
EA16X265	D602	MLS Program LED
EA16X265	D603	MLS Program LED
EA16X477	D604	Limiter, Si, BA317
EA16X477	D605	Limiter, Si, BA317
EA16X508	D606	Zener, RD6.8EB3
EA16X508	D607	Zener, RD6.8EB3
EA16X477	D608	Diode, Si, BA317

TRANSISTORS & INTEGRATED CIRCUITS

EA33X8573	IC1	AM/FM IF Amp, HA12413
EA33X8591	IC2	MPX, uPC1197C
EA33X8708	IC101	Tape Pre-Amp, LA3160
EA33X8722	IC102	Rec. Pre-Amp, TA7658P
EA33X8599	IC103	Audio Power Amp, HA1392
EA33X8597	IC601	MLS Amp, LC7510
EA15X511	Q1	FM Rf, 2SK212E
EA15X376	Q2	FM Mixer, 2SC1674L
EA15X350	Q3	AM Conv., 2SC1675L
EA15X376	Q4	FM Osc., 2SC1674L
EA15X335	Q5	Meter Amp, 2SC945P
EA15X526	Q101	Buffer Amp, 2SC1844E
EA15X526	Q102	Tone Amp, 2SC1844E
EA15X526	Q103	Pre-Amp, 2SC1844E
EA15X527	Q104	8.4V B+ Regulator,2SD882P
EA15X488	Q105	Bias Osc., 2SC2001L
EA15X335	Q106	Muting, 2SC945P
EA15X526	Q201	Buffer Amp, 2SC1844E
EA15X526	Q202	Tone Amp, 2SC1844E
EA15X526	Q203	Pre-Amp, 2SC1844E
EA15X527	Q204	Motor 9V Regulator,2SD882P
EA15X421	Q206	Mute, 2SA733P
EA15X335	Q601	Mute, 2SC945Q
EA15X488	Q602	Solenoid Driver, 2SC2001L

TRANSFORMERS & COILS

	EA36X659	L1	FM Rf Coil
	EA36X700	L2	FM Trap Coil
	EA83X186	L3	AM antenna
	EA36X701	L4	AM Osc. Coil
	EA36X661	L5	FM Osc. Coil
	EA36X702	L6	Coil
	EA36X703	L7	Coil
	EA36X665	L201	Bias Osc. Coil
	EA36X660	L202	Coil
	EA62X313	L301	Solenoid
	EA61X394	T1	1st. FM IF
	EA61X395	T2	1st. AM IF
	EA61X396	T3	2nd. AM IF
⚠	EA88X292	T501	AC Power Transformer (Canadian Only)
⚠	EA88X294	T501	AC Power Transformer (U.S.A. Only)

REPLACEMENT PARTS LIST MODEL 3-5259A

ELECTRICAL

SWITCHES

CAT. NO.	REF. NO.	DESCRIPTION
EA39X495 (assembly)	S1	Aux-in
	S2	Radio
	S3	Tape
	S4	CrO_2 /Metal Tape
	S5	Meter
	S6	Stereo Accent
	S7	Loudness
	S8	Power On-Off
(Part of J106/107)	S9	AC/DC switch
EA39X474	S10	Osc. Beat Cut
EA39X496	S11	Play/Record
EA39X506	S12	MLS/Play
EA39X476	S13	MLS selector
EA39X507	S14	Fast Forward/Rewind
EA39X469	S15	Motor on-off
EA39X508	S16	Band switch

FILTERS

EA10X44	B.P.F.	Band Pass Filter
EA36X698	CF1	10.7MHz ceramic filter
EA36X698	CF2	10.7MHz ceramic filter
EA36X699	CF3	455KHz ceramic filter
EA36X698	CF4	10.7 MHz ceramic filter

JACKS

EA41X296	J101	Aux-in (L)
EA41X262	J102	External Microphone (L)
EA41X303	J103	Remote On-Off
EA41X344	J104	Stereo Headphone
EA41X296	J105	External Speaker (L)
EA41X345	J106/107	AC power/Ext. DC w/59
EA41X296	J201	Aux-in (R)
EA41X262	J202	External Microphone (R)
EA41X296	J205	External Speaker (R)

MISCELLANEOUS

⚠ EA10X44	F1	Fuse, 3.15A (Canadian Only)
⚠ EA41X359	MS-4	Fuse Holder (Canadian Only)

Note:
1. MS references are for factory use only.
2. Parts not listed or listed without catalog numbers are non-stocked items.
3. Parts marked with ⚠ are important for maintaining the safety of the set. Be sure to replace these with only specified one for maintaining the safety and performance of the unit.

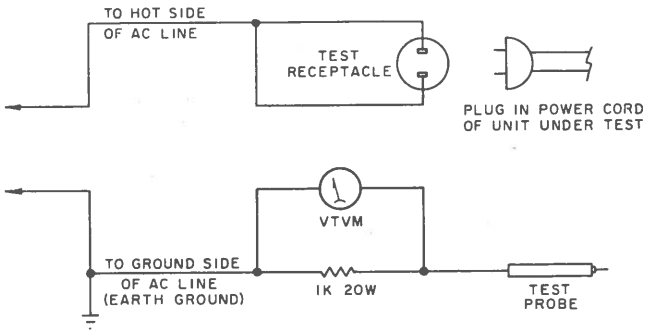
Replacement parts maybe ordered from: General Electric Co., National Parts Distribution, P. O. Box 7025, Charlotte, N.C. 28217 or in CANADA - Canadian General Electric, 80 Bradford St., P. O. Box 1060, Barrie, Ontario, L4M5E1.

IMPORTANT

PERFORM THE FOLLOWING SAFETY CHECKS AFTER SERVICING THIS UNIT:

1. Remove all externally connected test equipment and wires before safety testing this unit.
2. Use RT6440 Safety Test Box or construct circuit as shown.
3. Plug power cord of unit to be tested into Test Receptacle.
4. Switch unit being tested to ON or PLAY position.
5. Connect VTVM across 1K resistor in test circuit. Set meter on high (150V AC) scale to avoid meter damage and touch the following points with Test Probe.
   a) Barrel of Right External Microphone Jack.
   b) Speaker Grille - Left Side.
   c) Positive Battery Terminal Near AC Power Cord Socket.

If meter reading indicates less than 3 volts on all test points, set meter to low (3VAC) scale and repeat test.



6. Any reading greater than two tenths (.2) volt indicates a potential shock hazard. If this occurs, determine the cause of the leakage, correct the problem, and repeat safety test.

GENERAL ELECTRIC

GENERAL ELECTRIC

AUDIO SERVICE SUPPLEMENT

MODEL
3-5259A
AM/FM/FM STEREO
CASSETTE RECORDER

FILE TAB 3

THIS SUPPLEMENT CONTAINS UPDATED OR ADDITIONAL REPLACEMENT PARTS & SERVICE INFORMATION. FILE AHEAD OF THE SERVICE MANUAL FOR THIS MODEL.

Service Hints

1. Tape Cassette Lid Failure.

   Cassette lid may fail to open/close, broken or loose fitting.
   Remove and replace cassette lid frame [Ref. No. B1-2], Catalog No. EA9X606.
   When remounting cassette lid, eject spring [Ref. No. B1-6] on cassette lid frame. Place a small amount of glue or paint on area where both parts contact each other.

2. Tape Mechanism jamms, hangs up or fails to cycle properly.
   Replace main drive belt [Ref. No. 84], Catalog No. EA1X845 and properly clean drive surface.
   Do not attempt to clean old drive belt.

3. Tape Mechanism fails to go into play or record mode, (Refer to Exploded View Tape Mechanism).

   Inspect and be sure spring [Ref. No. 46] is not loose or has fallen off.

Replacement Parts List Corrections/Additions

CAT. NO.	REF. NO.	DESCRIPTION	CORRECTION OR ADDITION
EA9X735	A-11	Cassette Lid Window	Add to Parts List
EA9X606	B1-2	Cassette Door Holder	Was B1-1 & EA9X620
EA3X693	B1-6	Eject Spring	Add to Parts List
EA3X694	B2-1	Handle Stopper	Add to Parts List